**高被引论文：**

第 1 条，共 381 条

标题: Evolution of the Miocene Ailaoshan orogenic gold deposits, southeastern Tibet, during a complex tectonic history of lithosphere-crust interaction

作者: Wang, QF (Wang, Qingfei); Groves, DI (Groves, David, I); Deng, J (Deng, Jun); Li, HJ (Li, Huajian); Yang, L (Yang, Lin); Dong, CY (Dong, Chaoyi)

来源出版物: MINERALIUM DEPOSITA 卷: 55 期: 6 页: 1085-1104 DOI: 10.1007/s00126-019-00922-3 出版年: AUG 2020

Web of Science 核心合集中的 "被引频次": 18

被引频次合计: 19

摘要: The orogenic gold deposits along the NNW-trending Ailaoshan shear zone are formed during Miocene continental collision, after a complex history of Neoproterozoic subduction, Late Triassic amalgamation between the Indochina and South China blocks after closure of the Paleo-Tethyan Ocean, and Oligocene-Eocene continental-scale shearing related to the Indian-Eurasian continental collision. As a result, the eastern Neoproterozoic basement with ductile shear zones was thrust over the western metasedimentary rocks and Paleo-Tethyan ophiolites affected by brittle faulting. These tectonically juxtaposed successions were underlain by lithosphere metasomatized in the Neoproterozoic. The gold-hosting western succession is characterized by tightly folded Silurian to Permian metasedimentary rocks, overlain by gently folded Late Triassic metasedimentary rocks, and cut by secondary NW-trending shear zones. This crustal architecture controlled migration of ore fluid towards the cessation of regional ductile deformation at ca. 22 Ma, with major ductile shear zones serving as the main conduit, tight folds, and jogs or intersections on subsidiary brittle shear zones as the fluid trap, and Late Triassic rocks as the seal. Gold-rich rims on disseminated gold-poor sedimentary pyrite with a limited delta S-34 range from - 3 to 3 parts per thousand, pyrite He-Ar isotope ratios, and the timing of mineralization within retrograde metamorphism suggest an important metal contribution from mantle lithosphere. The auriferous fluid, derived from previously metasomatized mantle lithosphere, is interpreted to have advected up the Ailaoshan shear zone into the metasedimentary sequence during mantle upwelling, clearly contrasting with widely accepted crustal metamorphic models for Phanerozoic orogenic gold deposits.

入藏号: WOS:000546421000003

PubMed ID: 31634057

出版商: SPRINGER

出版商地址: ONE NEW YORK PLAZA, SUITE 4600, NEW YORK, NY, UNITED STATES

Web of Science 类别: Geochemistry & Geophysics; Mineralogy

ISSN: 0026-4598

eISSN: 1432-1866

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 2 条，共 381 条

标题: Exergoeconomic optimization of a new double-flash geothermal-based combined cooling and power (CCP) system at two different cooling temperatures assisted by boosters

作者: Tian, MW (Tian, Man-Wen); Parikhani, T (Parikhani, Towhid); Jermsittiparsert, K (Jermsittiparsert, Kittisak); Ashraf, MA (Ashraf, Muhammad Aqeel)

来源出版物: JOURNAL OF CLEANER PRODUCTION 卷: 261 文献号: 120921 DOI: 10.1016/j.jclepro.2020.120921 出版年: JUL 10 2020

Web of Science 核心合集中的 "被引频次": 22

被引频次合计: 22

摘要: A new cooling/power cogeneration system applicable to double-flash geothermal power plants is devised which provides cooling load at two different adjustable cooling temperatures. To further increase efficiency of the set-up, two boosters are employed to boost pressure of the secondary flow of each ejector due to the considerable drop of pressure of the geofluid through the steam turbines as well as the throttling valves. A comprehensive modeling of the proposed system is achieved from thermodynamics laws as well as economic perspectives and the results are elaborated with more details. In comparison with the previous integrated systems based on the flash geothermal power plants, the present system produces around 47.8% more cooling load and 38.9% more electricity. Also, the results of multi-objective optimization revealed that the net electrical power and exergetic efficiency can be increased approximately 20.59% and 68.11%, respectively. However, the unit cost of power and cooling (UCPC) is decreased around 36.3%. Meantime, the total exergy destruction rate is decreased after optimization. Among all elements, the highest exergy destruction occurred in the condenser by 2570 kW out of 7609 kW (in base mode) and 2333 kW out of 6836 kW (in optimum mode). Also, it is found that the energy efficiency of the proposed system can be increased by increasing turbines outlet pressure, boosters pressure ratio, and separator 1 pressure or decreasing separator 2 pressure. (C) 2020 Elsevier Ltd. All rights reserved.

入藏号: WOS:000533538400002

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Green & Sustainable Science & Technology; Engineering, Environmental; Environmental Sciences

ISSN: 0959-6526

eISSN: 1879-1786

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16

第 3 条，共 381 条

标题: Different sampling strategies for predicting landslide susceptibilities are deemed less consequential with deep learning

作者: Dou, J (Dou, Jie); Yunus, AP (Yunus, Ali P.); Merghadi, A (Merghadi, Abdelaziz); Shirzadi, A (Shirzadi, Ataollah); Nguyen, H (Hoang Nguyen); Hussain, Y (Hussain, Yawar); Avtar, R (Avtar, Ram); Chen, Y (Chen, Yulong); Pham, BT (Binh Thai Pham); Yamagishi, H (Yamagishi, Hiromitsu)

来源出版物: SCIENCE OF THE TOTAL ENVIRONMENT 卷: 720 文献号: 137320 DOI: 10.1016/j.scitotenv.2020.137320 出版年: JUN 10 2020

Web of Science 核心合集中的 "被引频次": 23

被引频次合计: 23

摘要: Predictive capability of landslide susceptibilities is assumed to be varied with different sampling techniques, such as (a) the landslide scarp centroid, (b) centroid of landslide body, (c) samples of the scrap region representing the scarp polygon, and (d) samples of the landslide body representing the entire landslide body. However, new advancements in statistical and machine learning algorithms continuously being updated the landslide susceptibility paradigm. This paper explores the predictive performance power of different sampling techniques in landslide susceptibility mapping in the wake of increased usage of artificial intelligence. We used logistic regression (LR), neural network (NNET), and deep learning neural network (DNN) model for testing and validation of the models. The tests were applied to the 2018 Hokkaido Earthquake affected areas using a set of 11 predictor variables (seismic, topographic, and hydrological). We found that the prediction rates are inconsequential with the DNN model irrespective of the sampling technique (AUC: 0.904 - 0.919). Whereas, testing with LR (AUC: 0.825 - 0.785) and NNET (AUC: 0.882 - 0.858) produces larger differences in the accuracies between the four datasets. Nonetheless, the highest success rates were obtained for samples within the landslide scarp area. The analogy was then validated with a published landslide inventory from the 2015 Gorkha earthquake. We, therefore, suggest that DNN models as an appropriate technique to increase the predictive performance of landslide susceptibilities if the landslide scarp and body are not characterized properly in an inventory. (C) 2020 Elsevier B.V. All rights reserved.

入藏号: WOS:000525736600041

PubMed ID: 32325551

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Environmental Sciences

ISSN: 0048-9697

eISSN: 1879-1026

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 4 条，共 381 条

标题: Mining spatiotemporal association patterns from complex geographic phenomena

作者: He, ZJ (He, Zhanjun); Deng, M (Deng, Min); Cai, JN (Cai, Jiannan); Xie, Z (Xie, Zhong); Guan, QF (Guan, Qingfeng); Yang, C (Yang, Chao)

来源出版物: INTERNATIONAL JOURNAL OF GEOGRAPHICAL INFORMATION SCIENCE 卷: 34 期: 6 特刊: SI 页: 1162-1187 DOI: 10.1080/13658816.2019.1566549 出版年: JUN 2 2020

Web of Science 核心合集中的 "被引频次": 23

被引频次合计: 24

摘要: Spatiotemporal association pattern mining can discover interesting interdependent relationships among various types of geospatial data. However, existing mining methods for spatiotemporal association patterns usually model geographic phenomena as simple spatiotemporal point events. Therefore, they cannot be applied to complex geographic phenomena, which continuously change their properties, shapes or locations, such as storms and air pollution. The most salient feature of such complex geographic phenomena is the geographic dynamic. To fully reveal dynamic characteristics of complex geographic phenomena and discover their associated factors, this research proposes a novel complex event-based spatiotemporal association pattern mining framework. First, a complex geographic event was hierarchically modeled and represented by a new data structure named directed spatiotemporal routes. Then, sequence mining technique was applied to discover the spatiotemporal spread pattern of the complex geographic events. An adaptive spatiotemporal episode pattern mining algorithm was proposed to discover the candidate driving factors for the occurrence of complex geographic events. Finally, the proposed approach was evaluated by analyzing the air pollution in the region of Beijing-Tianjin-Hebei. The experimental results showed that the proposed approach can well address the geographic dynamic of complex geographic phenomena, such as the spatial spreading pattern and spatiotemporal interaction with candidate driving factors.

入藏号: WOS:000530991600004

出版商: TAYLOR & FRANCIS LTD

出版商地址: 2-4 PARK SQUARE, MILTON PARK, ABINGDON OR14 4RN, OXON, ENGLAND

Web of Science 类别: Computer Science, Information Systems; Geography; Geography, Physical; Information Science & Library Science

ISSN: 1365-8816

eISSN: 1362-3087

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 5 条，共 381 条

标题: Behavior of calcium isotopes during continental subduction recorded in meta-basaltic rocks

作者: Lu, WN (Lu, Wen-Ning); He, YS (He, Yongsheng); Wang, Y (Wang, Yang); Ke, S (Ke, Shan)

来源出版物: GEOCHIMICA ET COSMOCHIMICA ACTA 卷: 278 特刊: SI 页: 392-404 DOI: 10.1016/j.gca.2019.09.027 出版年: JUN 1 2020

Web of Science 核心合集中的 "被引频次": 7

被引频次合计: 7

摘要: In order to investigate the behavior of Ca isotopes during subduction, we report high precision Ca isotopic data of a suit of well-characterized meta-basaltic rocks from the Dabie-Sulu orogen, including six greenschists, six amphibolites and seven eclogites. Except two samples that may have been affected by carbonation alteration, greenschists, amphibolites and eclogites yield comparable delta Ca-44/42 values ranging from 0.36 to 0.41 parts per thousand, 0.32 to 0.39 parts per thousand and 0.32 to 0.42 parts per thousand, respectively. Overall, Dabie-Sulu meta-basaltic rocks have an average delta Ca-44/42 of 0.37 +/- 0.06 parts per thousand (2SD, N = 17/19), comparable to terrestrial basalts previously reported (0.36 +/- 0.05 parts per thousand, 2SD; N = 34). Combined with no correlation of delta Ca-44/42 with H2O and Rb/TiO2, this study suggests that prograde metamorphism dehydration cannot significantly fractionate Ca isotopic compositions of meta-basaltic rocks. Given the comparable CaO contents in meta-basaltic rocks with increasing metamorphism grade, isotope fractionation may be limited by insignificant Ca loss during dehydration. Two heavy greenschists with delta Ca-44/42 of 0.46 parts per thousand and 0.49 parts per thousand also have high CO2 concentrations, indicating carbonation alteration that is evidenced by 0.04M HCl leaching experiments. The limited delta Ca-44/42 variation observed in the other metamorphic samples is most likely inherited from their igneous protoliths. Considering that terrestrial basalts have delta Ca-44/42 systematically lower than the upper mantle, subduction of mafic lithologies (e.g., oceanic slabs) thus could reflux light Ca isotopes back into the mantle and may create mantle heterogeneity. (C) 2019 Elsevier Ltd. All rights reserved.

入藏号: WOS:000536445700012

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0016-7037

eISSN: 1872-9533

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 6 条，共 381 条

标题: Hierarchical Controller-Estimator for Coordination of Networked Euler-Lagrange Systems

作者: Ge, MF (Ge, Ming-Feng); Liu, ZW (Liu, Zhi-Wei); Wen, GH (Wen, Guanghui); Yu, XH (Yu, Xinghuo); Huang, TW (Huang, Tingwen)

来源出版物: IEEE TRANSACTIONS ON CYBERNETICS 卷: 50 期: 6 页: 2450-2461 DOI: 10.1109/TCYB.2019.2914861 出版年: JUN 2020

Web of Science 核心合集中的 "被引频次": 20

被引频次合计: 20

摘要: This paper proposes several hierarchical controller-estimator algorithms (HCEAs) to solve the coordination problem of networked Euler-Lagrange systems (NELSs) with sampled-data interactions and switching interaction topologies, where the cases with both discontinuous and continuous signals are successfully addressed in a unified framework. The HCEAs comprise two main layers (i.e., a control layer and an estimator layer) and one optional layer (i.e., a filter layer), in which the coordination problem is tackled in the main layers and the transient response can be optionally smoothed in the filter layer. For stabilizing the corresponding cascade closed-loop systems, several sufficient conditions on the upper bound of the aperiodic sampling intervals and the lower bound of the control parameters are established. In addition, the HCEAs are extended to address the task-space coordination problem of networked heterogeneous robotic systems, which shows the versatility of the HCEAs. Finally, comparison studies and simulation results are provided to demonstrate the effectiveness, significance, and advantages of the presented algorithms.

入藏号: WOS:000536299200011

PubMed ID: 31150351

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Automation & Control Systems; Computer Science, Artificial Intelligence; Computer Science, Cybernetics

ISSN: 2168-2267

eISSN: 2168-2275

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 7 条，共 381 条

标题: Recent advances in carbon dioxide utilization

作者: Zhang, ZE (Zhang, Zhien); Pan, SY (Pan, Shu-Yuan); Li, H (Li, Hao); Cai, JC (Cai, Jianchao); Olabi, AG (Olabi, Abdul Ghani); Anthony, EJ (Anthony, Edward John); Manovic, V (Manovic, Vasilije)

来源出版物: RENEWABLE & SUSTAINABLE ENERGY REVIEWS 卷: 125 文献号: 109799 DOI: 10.1016/j.rser.2020.109799 出版年: JUN 2020

Web of Science 核心合集中的 "被引频次": 27

被引频次合计: 27

摘要: Carbon dioxide (CO2) is the major contributor to greenhouse gas (GHG) emissions and the main driver of climate change. Currently, CO2 utilization is increasingly attracting interest in processes like enhanced oil recovery and coal bed methane and it has the potential to be used in hydraulic fracturing processes, among others. In this review, the latest developments in CO2 capture, utilization, conversion, and sequestration are examined through a multi-scale perspective. The diverse range of CO2 utilization applications, including mineralization, biological utilization, food and beverages, energy storage media, and chemicals, is comprehensively presented. We also discuss the worldwide research and development of CO2 utilization projects. Lastly, we examine the key challenges and issues that must be faced for pilot-scale and industrial applications in the future. This study demonstrates that CO2 utilization can be a driver for the future development of carbon capture and utilization technologies. However, considering the amount of CO2 produced globally, even if it can be reduced in the near-to mid-term future, carbon capture and storage will remain the primary strategy and, so, complementary strategies are desirable. Currently, the main CO2 utilization industry is enhanced oil and gas recovery, but considering the carbon life cycle, these processes still add CO2 to the atmosphere. In order to implement other CO2 utilization technologies at a large scale, in addition to their current technical feasibility, their economic and societal viability is critical. Therefore, future efforts should be directed toward reduction of energy penalties and costs, and the introduction of policies and regulation encouraging carbon capture, utilization and storage, and increasing the public acceptance of the strategies in a complementary manner.

入藏号: WOS:000525862700007

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Green & Sustainable Science & Technology; Energy & Fuels

ISSN: 1364-0321

eISSN: 1879-0690

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 8 条，共 381 条

标题: IN SITU DATING OF HYDROTHERMAL MONAZITE AND IMPLICATIONS FOR THE GEODYNAMIC CONTROLS ON ORE FORMATION IN THE JIAODONG GOLD PROVINCE, EASTERN CHINA

作者: Deng, J (Deng, Jun); Qiu, KF (Qiu, Kun-Feng); Wang, QF (Wang, Qing-Fei); Goldfarb, R (Goldfarb, Richard); Yang, LQ (Yang, Li-Qiang); Zi, JW (Zi, Jian-Wei); Geng, JZ (Geng, Jian-Zhen); Ma, Y (Ma, Yao)

来源出版物: ECONOMIC GEOLOGY 卷: 115 期: 3 页: 671-685 DOI: 10.5382/econgeo.4711 出版年: MAY 1 2020

Web of Science 核心合集中的 "被引频次": 27

被引频次合计: 29

摘要: The Jiaodong gold province, the largest gold producer in China, formed in a setting dominated by a 30-m.y. episode of Izanagi plate rollback and widespread extension, concomitant with late Mesozoic craton destruction. This study presents new high precision in situ sensitive high-resolution ion microprobe (SHRIMP) U-Th-Pb and laser ablation-inductively coupled plasma-mass spectrometry (LA-ICP-MS) U-Pb ages for hydrothermal monazite from the largest of the Jiaodong gold deposits, which were previously dated as indicating ore formation over a few tens of millions of years when applying sericite Ar-Ar, zircon U-Pb, and less robust analytical techniques. Our U-Pb dating on monazite from the Jiaojia and Linglong deposits in western Jiaodong yielded consistent ages at ca. 120 Ma. The new geochronologic results, coupled with recently reported in situ monazite dates from smaller deposits in western Jiaodong, reveal that the deposits that host most of the >= 4,000-t Au resource formed during a relatively brief period at ca. 120 Ma. In eastern Jiaodong, the much smaller resource may have formed about 5 m.y. later, recorded by 114.2 +/- 1.5 Ma gold mineralization at the Rushan deposit. The postsubduction opening of a slab gap at ca. 120 Ma is the most likely cause of the extensive gold mineralization in Jiaodong. The gap induced a local and rapid devolatilization of the hydrated mantle wedge at submelt temperatures. The transient event included release of a major volume of gold-transporting aqueous-carbonic fluid that was stored in the wedge into major NNE-trending structures in the overlying lithosphere.

入藏号: WOS:000532696200010

出版商: SOC ECONOMIC GEOLOGISTS, INC

出版商地址: 7811 SCHAFFER PARKWAY, LITTLETON, CO 80127 USA

Web of Science 类别: Geochemistry & Geophysics; Mineralogy

ISSN: 0361-0128

eISSN: 1554-0774

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 9 条，共 381 条

标题: Soil vanadium(V)-reducing related bacteria drive community response to vanadium pollution from a smelting plant over multiple gradients

作者: Wang, S (Wang, Song); Zhang, BG (Zhang, Baogang); Li, TT (Li, Tingting); Li, ZY (Li, Zongyan); Fu, J (Fu, Jie)

来源出版物: ENVIRONMENT INTERNATIONAL 卷: 138 文献号: 105630 DOI: 10.1016/j.envint.2020.105630 出版年: MAY 2020

Web of Science 核心合集中的 "被引频次": 27

被引频次合计: 27

摘要: The mining and smelting of navajoite has resulted in a serious vanadium pollution in regional geological environments and significant influence on soil microorganisms. However, the core microbiome responsible for adjusting community response to vanadium pollution and the driving pattern have been kept unclear. In this study, a suite of surface and profile soil samples over multiple gradients were collected in four directions and distances of 10-2000 m from a vanadium smelting plant in Panzhihua, China. The indigenous microbial communities and vanadium(V)-reducing related bacteria (VRB) were profiled by 16S rRNA gene high-throughput sequencing technique. Five VRB were detected in the original collected soil samples including Bacillus, Geobacter, Clostridium, Pseudomonas and Comamonadaceae based on high-throughput sequencing data analysis, and their abundances were significantly related with the content of vanadium. Low vanadium concentration promoted the growth of VRB, while high vanadium concentration would inhibit VRB multiplication. The Gaussian equation could be used to quantitatively describe the nonlinear relationship between VRB and vanadium. Network analysis demonstrated that the microbial communities were significantly influenced by VRB assemblage, and 1.32-52.77% of microbes in the community showed a close association with VRB. A laboratory incubation experiment also confirmed the core role of VRB to drive community response to vanadium pressure.

入藏号: WOS:000522749900064

PubMed ID: 32163768

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Environmental Sciences

ISSN: 0160-4120

eISSN: 1873-6750

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 10 条，共 381 条

标题: Performance Enhancement of RCS and Application to Tracking Control of Chuck-Workpiece Systems

作者: Zhou, L (Zhou, Lan); She, JH (She, Jinhua); Zhang, XM (Zhang, Xian-Ming); Cao, ZW (Cao, Zhenwei); Zhang, Z (Zhang, Zhu)

来源出版物: IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS 卷: 67 期: 5 页: 4056-4065 DOI: 10.1109/TIE.2019.2921272 出版年: MAY 2020

Web of Science 核心合集中的 "被引频次": 15

被引频次合计: 15

摘要: This paper presents a linear-extended-state-observer-based repetitive control (RC) method to enhance the disturbance rejection performance and tracking performance for a nonlinear system with aperiodic uncertainties and disturbances. Both design scenarios, i.e., with and without a detailed mathematical model of the plant, are considered, respectively. The proposed method exhibits the following three attractive features. First, instead of tuning the observer gain via the bandwidth idea by trial and error, available information on the plant model is used to design the observer gain and the state-feedback RC gains. As a result, the disturbance rejection ability is elevated. Second, robust stability and learning efficiency are adjusted preferentially through two tuning parameters, which effectively improve both the transient and steady-state performance. Third, the observer gain and state-feedback RC gains are simultaneously optimized through an optimization algorithm, in which an index is introduced to evaluate the overall system performance. The design procedure of the system is presented in detail. Finally, an application to tracking control of a chuck-workpiece system demonstrates the validity of the proposed method. Comparisons with the conventional RC method, the standard extended-state-observer-based RC method, and a linear active-disturbance-rejection-control-based RC method show that the proposed method can achieve the best disturbance rejection performance.

入藏号: WOS:000516608400069

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Automation & Control Systems; Engineering, Electrical & Electronic; Instruments & Instrumentation

ISSN: 0278-0046

eISSN: 1557-9948

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 11 条，共 381 条

标题: Shale pore structure characteristics of the high and low productivity wells, Jiaoshiba shale gas field, Sichuan Basin, China: Dominated by lithofacies or preservation condition?

作者: Xu, S (Xu, Shang); Gou, QY (Gou, Qiyang); Hao, F (Hao, Fang); Zhang, BQ (Zhang, Baiqiao); Shu, ZG (Shu, Zhiguo); Lu, YB (Lu, Yangbo); Wang, YX (Wang, Yuxuan)

来源出版物: MARINE AND PETROLEUM GEOLOGY 卷: 114 文献号: 104211 DOI: 10.1016/j.marpetgeo.2019.104211 出版年: APR 2020

Web of Science 核心合集中的 "被引频次": 10

被引频次合计: 10

摘要: Both the characteristics of lithofacies and tectonic movements are important factors in controlling the development, destruction, and preservation of pores in shale reservoirs. However, the main factors that control the structure of shale pores are complex and highly disputed, restricting the understanding of the mechanisms that lead to the accumulation of shale gas. In this study, mineral composition and geochemical analyses, high resolution field emission scanning electron microscopy (FE-SEM), and low-pressure gas adsorption (N-2 and CO2) were conducted to evaluate the pore systems of different types shale in the Jiaoshiba area, Sichuan Basin. A total of three shale groups, including silica-rich high production shales, clay-rich low production shales, and silica-rich low production shales were identified on the basis of lithofacies and gas-bearing characteristics.

The highest values of TOC, pore volume, and specific surface area are found in the silica-rich high production shales, with an average of 4.182%, 33.04 x 10(-3) cm(3)/g, and 38.71 m(2)/g, respectively. The total pore volume and specific surface area in the clay-rich low production shales are 19.85% and 28.62% lower than that of silica-rich high production shales. This suggests that the types of lithofacies have a more prominent influence on the specific surface area of the shales, while the pore volume plays a smaller role. However, the pressure in silica-rich low production shales is often released due to strong tectonic deformation. The OM pores in the silica-rich low production shales therefore tend to be both compressed and closed, with low surface porosity and of round shape. The total pore volume and specific surface area of silica-rich low production shales are 34.63% and 22.0% lower than that of the silica-rich high production shales. This indicates that tectonic movement has a significant influence on the shale pore volume, while specific surface area has a smaller influence.

入藏号: WOS:000514747800043

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0264-8172

eISSN: 1873-4073

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 12 条，共 381 条

标题: Comparing biochar- and bentonite-supported Fe-based catalysts for selective degradation of antibiotics: Mechanisms and pathway

作者: Li, Z (Li, Zhe); Sun, YQ (Sun, Yuqing); Yang, Y (Yang, Yang); Han, YT (Han, Yitong); Wang, TS (Wang, Tongshuai); Chen, JW (Chen, Jiawei); Tsang, DCW (Tsang, Daniel C. W.)

来源出版物: ENVIRONMENTAL RESEARCH 卷: 183 文献号: 109156 DOI: 10.1016/j.envres.2020.109156 出版年: APR 2020

Web of Science 核心合集中的 "被引频次": 13

被引频次合计: 13

摘要: The selective degradation of recalcitrant antibiotics into byproducts with low toxicity and high biodegradability has been increasingly popular using peroxymonosulfate (PMS) based advanced oxidation processes (AOPs). In this paper, two Fe-based heterogeneous catalysts, bentonite supported Fe-Ni composite (BNF) and biochar-supported Fe composite (Fe/C), were tailored and comprehensively characterized for distinctive physicochemical properties, crystalline structures, and interfacial behaviors. Two widely used antibiotics, sulfapyridine (SPY) and oxytetracycline (OTCs) at their common concentrations in pharmaceutical wastewaters (250 and 10 mg L-1) were tested for degradation in three PMS-based oxidation processes, i.e., PMS, PMS-BNF, and PMS-Fe/C, respectively. Results demonstrated that a large amount of PMS (10 and 1 mM) could effectively remove SPY (0.385 min(-1), 100% removal) and OTC (2.737 min(-1), 100% removal) via O-1(2) derived from PMS self-decomposition and non-radical pathway, respectively. Additional Fe-based catalysts (0.5 g L-1 Fe/C and BNF) significantly reduced the PMS consumption (1 and 0.25 mM) and accelerated the reaction rate (1.08 and 5.05 min(-1)) of SPY and OTC removal. Moreover, the supplementary catalysts shifted the degradation route. The biochar matrix in Fe/C composite contributed to predominant interaction with PMS forming O-1(2), which preferably attacked SPY via hydroxylation. In contrast, the redox-active Fe-Ni pairs induced SO4 center dot(-) formation, which could selectively degrade OTC through decarboxylation. Thus, these results are conducive to tailoring advanced yet low-cost heterogeneous catalysts for eco-friendly treatment of antibiotics-rich industrial wastewaters.

入藏号: WOS:000526177500022

PubMed ID: 32000003

出版商: ACADEMIC PRESS INC ELSEVIER SCIENCE

出版商地址: 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA

Web of Science 类别: Environmental Sciences; Public, Environmental & Occupational Health

ISSN: 0013-9351

eISSN: 1096-0953

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 13 条，共 381 条

标题: Finding Multiple Roots of Nonlinear Equation Systems via a Repulsion-Based Adaptive Differential Evolution

作者: Gong, WY (Gong, Wenyin); Wang, Y (Wang, Yong); Cai, ZH (Cai, Zhihua); Wang, L (Wang, Ling)

来源出版物: IEEE TRANSACTIONS ON SYSTEMS MAN CYBERNETICS-SYSTEMS 卷: 50 期: 4 页: 1499-1513 DOI: 10.1109/TSMC.2018.2828018 出版年: APR 2020

Web of Science 核心合集中的 "被引频次": 25

被引频次合计: 25

摘要: Finding multiple roots of nonlinear equation systems (NESs) in a single run is one of the most important challenges in numerical computation. We tackle this challenging task by combining the strengths of the repulsion technique, diversity preservation mechanism, and adaptive parameter control. First, the repulsion technique motivates the population to find new roots by repulsing the regions surrounding the previously found roots. However, to find as many roots as possible, algorithm designers need to address a key issue: how to maintain the diversity of the population. To this end, the diversity preservation mechanism is integrated into our approach, which consists of the neighborhood mutation and the crowding selection. In addition, we further improve the performance by incorporating the adaptive parameter control. The purpose is to enhance the search ability and remedy the trial-and-error tuning of the parameters of differential evolution (DE) for different problems. By assembling the above three aspects together, we propose a repulsion-based adaptive DE, called RADE, for finding multiple roots of NESs in a single run. To evaluate the performance of RADE, 30 NESs with diverse features are chosen from the literature as the test suite. Experimental results reveal that RADE is able to find multiple roots simultaneously in a single run on all the test problems. Moreover, RADE is capable of providing better results than the compared methods in terms of both root rate and success rate.

入藏号: WOS:000522225200026

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Automation & Control Systems; Computer Science, Cybernetics

ISSN: 2168-2216

eISSN: 2168-2232

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 14 条，共 381 条

标题: Solving Nonlinear Equations System With Dynamic Repulsion-Based Evolutionary Algorithms

作者: Liao, ZW (Liao, Zuowen); Gong, WY (Gong, Wenyin); Yan, XS (Yan, Xuesong); Wang, L (Wang, Ling); Hu, CY (Hu, Chengyu)

来源出版物: IEEE TRANSACTIONS ON SYSTEMS MAN CYBERNETICS-SYSTEMS 卷: 50 期: 4 页: 1590-1601 DOI: 10.1109/TSMC.2018.2852798 出版年: APR 2020

Web of Science 核心合集中的 "被引频次": 18

被引频次合计: 19

摘要: Nonlinear equations system (NES) arises commonly in science and engineering. Repulsion techniques are considered to be the effective methods to locate different roots of NES. In general, the repulsive radius needs to be given by the user before the run. However, its optimal parameter setting is difficult and problem-dependent. To alleviate this drawback, in this paper, we first propose a dynamic repulsion technique, and then a general framework based on the dynamic repulsion technique and evolutionary algorithms (EAs) is presented to effectively solve NES. The major advantages of our framework are: 1) the repulsive radius is controlled dynamically during the evolutionary process; 2) multiple roots of NES can be simultaneously located in a single run; 3) the diversity of the population is preserved due to the population reinitialization; and 4) different repulsion techniques and different EAs can be readily integrated into this framework. To extensively evaluate the performance of our framework, we choose 42 problems with diverse features as the test suite. In addition, some representative differential evolution and particle swarm optimization variants are incorporated into the framework. Our method is also compared with other state-of-the-art methods. Experimental results indicate that the dynamic repulsion technique can improve the performance of the original repulsion technique with static repulsive radius. Moreover, the proposed method is able to yield better results compared with other methods.

入藏号: WOS:000522225200034

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Automation & Control Systems; Computer Science, Cybernetics

ISSN: 2168-2216

eISSN: 2168-2232

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 15 条，共 381 条

标题: Manufacturing industry agglomeration and spatial clustering: Evidence from Hebei Province, China

作者: Li, CX (Li, Chenxi); Wu, KN (Wu, Kening); Gao, XY (Gao, Xiangyu)

来源出版物: ENVIRONMENT DEVELOPMENT AND SUSTAINABILITY 卷: 22 期: 4 页: 2941-2965 DOI: 10.1007/s10668-019-00328-1 出版年: APR 2020

Web of Science 核心合集中的 "被引频次": 15

被引频次合计: 15

摘要: Industrial spatial agglomeration is the most prominent geographical feature of economic activities. This paper examined the current situation of manufacturing industry agglomeration in Hebei Province by using the industrial location quotient and exploratory spatial data analysis. The results showed that (1) the industrial location quotient of 11 cities' 31 manufacturing industries in Hebei Province indicated that there was a significant difference among manufacturing industry agglomeration of the 11 cities in Hebei Province. (2) Global spatial autocorrelation of manufacturing industry agglomeration showed that TA (Manufacture of Textile, Apparel), T (Manufacture of Textile), PFM (Manufacture and Processing of Ferrous Metals), CF (Manufacture of Chemical Fibre), LFF (Manufacture of Leather, Fur, Feather and Its Products and Footwear), AAE (Manufacture of Articles for Culture, Arts and Crafts, Education, Sport Activities and Entertainment Goods) and RP (Manufacture of Rubber and Plastic) showed agglomeration characteristics. (3) According to the industrial location quotient and local spatial autocorrelation, the spatial cluster of manufacturing industry agglomeration in Hebei Province was divided into "Diffusion Centre", "Primary Diffusion Centre", "Polarization Centre" and "Less Developed Area".

入藏号: WOS:000519953200012

PubMed ID: 31135289

出版商: SPRINGER

出版商地址: VAN GODEWIJCKSTRAAT 30, 3311 GZ DORDRECHT, NETHERLANDS

Web of Science 类别: Green & Sustainable Science & Technology; Environmental Sciences

ISSN: 1387-585X

eISSN: 1573-2975

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 16 条，共 381 条

标题: Data-Driven Fault Diagnosis Method Based on Compressed Sensing and Improved Multiscale Network

作者: Hu, ZX (Hu, Zhong-Xu); Wang, Y (Wang, Yan); Ge, MF (Ge, Ming-Feng); Liu, J (Liu, Jie)

来源出版物: IEEE TRANSACTIONS ON INDUSTRIAL ELECTRONICS 卷: 67 期: 4 页: 3216-3225 DOI: 10.1109/TIE.2019.2912763 出版年: APR 2020

Web of Science 核心合集中的 "被引频次": 23

被引频次合计: 24

摘要: The diagnosis of the key components of rotating machinery systems is essential for the production efficiency and quality of manufacturing processes. The performance of the traditional diagnosis method depends heavily on feature extraction, which relies on the degree of individuals expertise or prior knowledge. Recently, a deep learning (DL) method is applied to automate feature extraction. However, training in the DL method requires a massive amount of sensor data, which is time consuming and poses a challenge for its applications in engineering. In this paper, a new data-driven fault diagnosis method based on compressed sensing (CS) and improved multiscale network (IMSN) is proposed to recognize and classify the faults in rotating machinery. CS is used to reduce the amount of raw data, from which the fault information is discovered. At the same time, it can be used to generate sufficient training samples for the subsequent learning. The one-dimensional compressed signal is converted to two-dimensional image for further learning. An IMSN is established for learning and obtaining deep features. It improves the diagnosis performance of the DL process. The faults of the key components are identified from a softmax model. Experimental analysis is performed to verify effectiveness of the proposed data-driven fault diagnosis method.

入藏号: WOS:000507307000068

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Automation & Control Systems; Engineering, Electrical & Electronic; Instruments & Instrumentation

ISSN: 0278-0046

eISSN: 1557-9948

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 17 条，共 381 条

标题: Reduced nontronite-activated H2O2 for contaminants degradation: The beneficial role of clayed fractions in ISCO treatments

作者: Liu, XX (Liu, Xixiang); Yuan, SH (Yuan, Songhu); Zhang, P (Zhang, Peng); Zhu, J (Zhu, Jian); Tong, M (Tong, Man)

来源出版物: JOURNAL OF HAZARDOUS MATERIALS 卷: 386 文献号: 121945 DOI: 10.1016/j.jhazmat.2019.121945 出版年: MAR 15 2020

Web of Science 核心合集中的 "被引频次": 9

被引频次合计: 9

摘要: Clayed fractions in aquifers are generally deemed to be detrimental for in silt chemical oxidation (ISCO) treatments due to the difficulty of oxidant injection/transport and the retention/rebound of contaminants. Using a model clay mineral nontronite and a real sediment, here we show that the component of structural FOLD in clay minerals is particularly effective in activating hydrogen peroxide (H2O2) to hydroxyl radicals ((OH)-O-center dot) for contaminants degradation under pH-neutral conditions. Using reduced nontronite (Fe(II)/Fe-total : 40 %) as a model Fe(II)-bearing clay mineral, 2 mg/L trichloroethylene (TCE) was degraded by 82.0 % and 95.3 % at 2.5 min and 30 min, respectively, under the condition of 0.6 g/L reduced nontronite, 0.5 mM H2O2 and pH 7.5. Reactive structural Fe(II) in nontronite was responsible for the initial quick reaction. The degradation was also efficient for phenol, benzoic, toluene and naphthalene, but exhibited higher efficiencies for those with stronger sorption to nontronite. With similar concentrations of H2O2 and Fe(II), nontronite-activated H2O2 at pH 7.5 led to similar efficiencies of TCE degradation and H2O2 utilization to classic homogeneous Fenton at pH 3. A real clayed sediment showed similar performance in activating H2O2 for contaminant degradation. Our findings implicate that clayed fractions in aquifers may probably contribute to contaminants degradation in H2O2-based ISCO treatments.

入藏号: WOS:000514748600036

PubMed ID: 31893557

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Environmental; Environmental Sciences

ISSN: 0304-3894

eISSN: 1873-3336

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 18 条，共 381 条

标题: Copper Uptake and Accumulation, Ultra-Structural Alteration, and Bast Fibre Yield and Quality of Fibrous Jute (Corchorus capsularis L.) Plants Grown under Two Different Soils of China

作者: Saleem, MH (Saleem, Muhammad Hamzah); Ali, S (Ali, Shafaqat); Irshad, S (Irshad, Sana); Hussaan, M (Hussaan, Muhammad); Rizwan, M (Rizwan, Muhammad); Rana, MS (Rana, Muhammad Shoaib); Hashem, A (Hashem, Abeer); Abd Allah, EF (Abd Allah, Elsayed Fathi); Ahmad, P (Ahmad, Parvaiz)

来源出版物: PLANTS-BASEL 卷: 9 期: 3 文献号: 404 DOI: 10.3390/plants9030404 出版年: MAR 2020

Web of Science 核心合集中的 "被引频次": 11

被引频次合计: 11

摘要: Copper (Cu) is an essential heavy metal for plants, but high Cu concentration in the soil causes phytotoxicity. Some plants, however, possess a system that can overcome Cu toxicity, such as Cu localization, and an active antioxidant defence system to reduce oxidative damage induced by high Cu concentration. The present study was conducted to explore the phytoremediation potential, morpho-physiological traits, antioxidant capacity, and fibre quality of jute (Corchorus capsularis) grown in a mixture of Cu-contaminated soil and natural soil at ratios of 0:1 (control), 1:0, 1:1, 1:2 and 1:4. Our results showed that high Cu concentration in the soil decreased plant growth, plant biomass, chlorophyll content, gaseous exchange, and fibre yield while increasing reactive oxygen species (ROS), which indicated oxidative stress induced by high Cu concentration in the soil. Antioxidant enzymes, such as superoxidase dismutase (SOD), peroxidase (POD), catalase (CAT) and ascorbate peroxidase (APX) scavenge ROS in plant cells/tissues. Furthermore, high Cu concentration did not significantly worsen the fibre quality of C. capsularis, and this plant was able to accumulate a large amount of Cu, with higher Cu accumulation in its shoots than in its roots. Transmission electron microscopy (TEM) revealed that Cu toxicity affected different organelles of C. capsularis, with the chloroplast as the most affected organelle. On the basis of these results, we concluded that high Cu concentration was toxic to C. capsularis, reducing crop yield and plant productivity, but showing little effect on plant fibre yield. Hence, C. capsularis, as a fibrous crop, can accumulate a high concentration of Cu when grown in Cu-contaminated sites.

入藏号: WOS:000525315000104

PubMed ID: 32213938

出版商: MDPI

出版商地址: ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND

Web of Science 类别: Plant Sciences

eISSN: 2223-7747

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 19 条，共 381 条

标题: The Bastar craton, central India: A window to Archean - Paleoproterozoic crustal evolution

作者: Santosh, M (Santosh, M.); Tsunogae, T (Tsunogae, T.); Yang, CX (Yang, Cheng-Xue); Han, YS (Han, Yue-Sheng); Hari, KR (Hari, K. R.); Prasanth, MPM (Prasanth, M. P. Manu); Uthup, S (Uthup, Sam)

来源出版物: GONDWANA RESEARCH 卷: 79 页: 157-184 DOI: 10.1016/j.gr.2019.09.012 出版年: MAR 2020

Web of Science 核心合集中的 "被引频次": 15

被引频次合计: 15

摘要: The Bastar craton in central India, surrounded by cratonic blocks and Paleoproterozoic to Neoproterozoic orogenic belts, is a window to investigate the Archean-Paleoproterozoic crustal evolution and tectonic processes. Here we propose a new tectonic classification of the craton into the Western Bastar Craton (WBC), Eastern Bastar Craton (EBC), and the intervening Central Bastar Orogen (CBO). We present petrologic, geochemical and zircon U-Pb, REE and Lu-Hf data from a suite of rocks from the CBO and along the eastern margin of the WBC Including: (1) volcanic successions comprising meta-andesite and fine-grained amphibolite, representing arc-related volcanics along a convergent margin; (2) ferruginous sandstone, in association with rhyolite, representing a volcano-sedimentary succession, deposited in an active trench; and (3) metamorphosed mafic-ultramafic suite including gabbro, pyroxenite and dunite invaded by trondhjemite representing the section of sub-arc mantle and arc root adjacent to a long-lasting subduction system. Petrologic studies indicate that the mafic-ultramafic suite crystallized from an island arc tholeiitic parental magma in a suprasubduction zone environment. The chondrite-normalized and primitive mantle normalized diagrams of the mafic and ultramafic rocks suggest derivation from MORB magma. The mixed characters from N-MORB to E-MORB of the studied samples are consistent with subduction modification of a MORB related magma, involving partial melting of the metasomatized mantle wedge. Our zircon U-Pb age data suggest that the cratonic nuclei was constructed as early as Paleoarchean. We present evidence for active subduction and arc magmatism through Mesoarchean to Neoarchean and early Paleoproterozoic, with the trench remaining open until at least 2.3 Ga. Two major crust building events are recognized in the Bastar craton: during Mesoarchean (recycled Paleoarchean subduction-related as well as juvenile/depleted mantle components) and Neoarchean (accretion of juvenile oceanic crust, arc magmatism including granite batholiths and related porphyry mineralization). The final cratonization occurred during latest Paleoproterozoic, followed by collisional assembly of the craton and its incorporation within the Peninsular Indian mosaic during Mesoproterozoic. In the global supercontinent context, the craton preserves the history of Ur, the earliest supercontinent, followed by the Paleo-Mesoproterozoic Columbia, as well as minor thermal imprints of the Neoproterozoic Rodinia and associated Grenvillian orogeny. (c) 2019 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000522974100009

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 20 条，共 381 条

标题: Mesozoic Orogenic Gold Mineralization in the Jiaodong Peninsula, China: A Focused Event at 120 +/- 2 Ma During Cooling of Pregold Granite Intrusions

作者: Zhang, L (Zhang, Liang); Weinberg, RF (Weinberg, Roberto F.); Yang, LQ (Yang, Li-Qiang); Groves, DI (Groves, David, I); Sai, SX (Sai, Sheng-Xun); Matchan, E (Matchan, Erin); Phillips, D (Phillips, David); Kohn, BP (Kohn, Barry P.); Miggins, DP (Miggins, Daniel P.); Liu, Y (Liu, Yue); Deng, J (Deng, Jun)

来源出版物: ECONOMIC GEOLOGY 卷: 115 期: 2 页: 415-441 DOI: 10.5382/econgeo.4716 出版年: MAR 1 2020

Web of Science 核心合集中的 "被引频次": 11

被引频次合计: 11

摘要: Jiaodong gold deposits are mainly sited along faulted contacts between Upper Jurassic Linglong granite and Precambrian basement metamorphic rocks or Lower Cretaceous Guojialing granite. Long-standing controversies relate to timing of gold mineralization and granite-gold relationships. In this study, gold-related muscovite consistently provides concordant Ar-40/Ar-39 plateau ages of 120 +/- 2 Ma (2 sigma) for the Jiaojia, Sizhuang, and Luoshan deposits. Analogous Ar-40/Ar-39 timing constraints from gold-related muscovite are provided by total gas and high-temperature ages from Fushun, concordant high-temperature ages from Rushan, and fusion-step ages from Xiadian deposits. These new Ar-40/Ar-39 ages, when combined with previous reliable Ar-40/Ar-39 and U-Pb age constraints for mineralization, including ages of pre- and postgold dikes, define a widespread gold mineralization event at 120 +/- 2 Ma (2 sigma). Published zircon U-Pb ages for Guojialing and Aishan granite magmatism suggest an similar to 8-m.y. lag between peak intrusive activity and gold mineralization. This, together with lack of both high-temperature alteration assemblages and alteration and/or metal zonation, indicates that the structurally controlled Jiaodong deposits are orogenic rather than intrusion-related deposits. Despite this, granite intrusions are considered to have provided suitable fluid trap sites. New Ar-40/Ar-39 analyses of biotite from the Linglong and Guojialing granites show they had cooled to about similar to 300 degrees +/- 50 degrees C by ca. 123 to 124 Ma, providing pressuretemperature conditions similar to those under which most orogenic gold deposits formed close to the ductilebrittle transition. This enabled the effective ingress of fluids at supralithostatic pressures at 120 +/- 2 Ma, leading to intensive brecciation, alteration, and deposition of both vein-type and disseminated gold ores. New zircon (U-Th)/He dates together with apatite fission-track data indicate that preservation of the gold province is due to slow postmineralization uplift and exhumation.

入藏号: WOS:000519582100008

出版商: SOC ECONOMIC GEOLOGISTS, INC

出版商地址: 7811 SCHAFFER PARKWAY, LITTLETON, CO 80127 USA

Web of Science 类别: Geochemistry & Geophysics; Mineralogy

ISSN: 0361-0128

eISSN: 1554-0774

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 21 条，共 381 条

标题: Evaluation of various approaches to predict cadmium bioavailability to rice grown in soils with high geochemical background in the karst region, Southwestern China

作者: Wen, YB (Wen, Yubo); Li, W (Li, Wei); Yang, ZF (Yang, Zhongfang); Zhuo, XX (Zhuo, Xiaoxiong); Guan, DX (Guan, Dong-Xing); Song, YX (Song, Yinxian); Guo, C (Guo, Chao); Ji, JF (Ji, Junfeng)

来源出版物: ENVIRONMENTAL POLLUTION 卷: 258 文献号: 113645 DOI: 10.1016/j.envpol.2019.113645 出版年: MAR 2020

Web of Science 核心合集中的 "被引频次": 10

被引频次合计: 11

摘要: Evaluating the bioavailability of Cd to rice (Oryza sativa L) was essential in the karst region, Southwestern China, where the soils have previously been shown to be anomalously enriched in Cd through geogenic processes. In this research, we examined the bioavailability of Cd to rice samples collected from 278 sites in Guangxi province, where rice is the most widely cultivated cereal crop that is responsible for the largest human dietary exposure to Cd. Both soil chemical extraction and soil-plant transfer modelling approaches were used to predict the bioavailability to rice. Some of the soil types were highly enriched in Cd, but their bioavailability was low, since the soil carbonates raised soil pH and remarkably reduced Cd bioavailability. In contrast, acidic soils (Ca was largely leached) with relatively low total Cd, the grown rice plants accumulated higher Cd in their grains. Results from CaCl2 extraction experiments provided good predictions for Cd in rice grain grown in soils of different types. Stepwise multiple regressions revealed soil pH and soil Ca content were the dominant factors that control the transfer of Cd from soil to rice. An extended Freundlich-type model and a polynomial surface model provided good prediction for Cd in rice grains. The diffusive gradients in thin films (DGT) technique gave the best estimation of soil Cd bioavailability, whereas water-extracted soil solution Cd provided relatively poor fits. Regional soil threshold that derived using the models, can avoid exceedance of Cd in rice and thereby enable local agricultural practitioners or authorities to develop appropriate management for croplands with high Cd background. (C) 2019 Elsevier Ltd. All rights reserved.

入藏号: WOS:000519655100090

PubMed ID: 31796323

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Environmental Sciences

ISSN: 0269-7491

eISSN: 1873-6424

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 22 条，共 381 条

标题: BS-Nets: An End-to-End Framework for Band Selection of Hyperspectral Image

作者: Cai, YM (Cai, Yaoming); Liu, XB (Liu, Xiaobo); Cai, ZH (Cai, Zhihua)

来源出版物: IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING 卷: 58 期: 3 页: 1969-1984 DOI: 10.1109/TGRS.2019.2951433 出版年: MAR 2020

Web of Science 核心合集中的 "被引频次": 9

被引频次合计: 9

摘要: Hyperspectral image (HSI) consists of hundreds of continuous narrowbands with high spectral correlation, which would lead to the so-called Hughes phenomenon and the high computational cost in processing. Band selection (BS) has been proven to be effective in avoiding such problems by removing redundant bands. However, many existing BS methods separately estimate the significance for every single band and cannot fully consider the nonlinear and global interaction between spectral bands. In this article, by assuming that a complete HSI band set can be reconstructed from its few informative bands, we propose a unified BS framework, BS Network (BS-Net). The framework consists of a band attention module (BAM), which aims to explicitly model the nonlinear interdependences between spectral bands, and a reconstruction network (RecNet), which is used to restore the original HSI from the learned informative bands, resulting in a flexible architecture. The resulting framework is end-to-end trainable, making it easier to train from scratch and to combine with many existing networks. We implement two versions of BS-Nets, respectively, using fully connected networks (BS-Net-FC) and convolutional neural networks (BS-Net-Conv), and extensively compare their results with popular existing BS approaches on three real hyperspectral data sets, showing that the proposed BS-Nets can accurately select informative band subset with less redundancy and outperform the competitors in terms of classification accuracy with competitive time cost.

入藏号: WOS:000519598700036

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Geochemistry & Geophysics; Engineering, Electrical & Electronic; Remote Sensing; Imaging Science & Photographic Technology

ISSN: 0196-2892

eISSN: 1558-0644

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 23 条，共 381 条

标题: Effects of agricultural alkaline substances on reducing the rainwater acidification: Insight from chemical compositions and calcium isotopes in a karst forests area

作者: Zeng, J (Zeng, Jie); Han, GL (Han, Guilin); Wu, QX (Wu, Qixin); Tang, Y (Tang, Yang)

来源出版物: AGRICULTURE ECOSYSTEMS & ENVIRONMENT 卷: 290 文献号: 106782 DOI: 10.1016/j.agee.2019.106782 出版年: MAR 1 2020

Web of Science 核心合集中的 "被引频次": 20

被引频次合计: 20

摘要: Two-year chemical and stable Ca isotopic compositions (delta(44)/Ca-40) of rainwater were detected in a typical karst virgin forest site (Maolan National Nature Reserved Park, Southwest China, MNNRP). The results show that the pH values and the ionic concentrations of rainwater samples vary considerably, and about half of them are defined as acidic rain (pH < 5.0). NH4+ is the predominant cation in rainwater with a volume weighted mean (VWM) value of 110 mu mol L-1 (1.3-377 mu mol L-1), and the second is Ca2+ with VWM value of 11.7 mu mol L-1 (0.9-67.7 mu mol L-1). SO42- and NO3- are the principal anions with VWM values of 51.8 mu mol L-1 (9.8-203 mu mol L-1) and 24.7 mu mol L-1 (2.7-151 mu mol L-1), respectively. Source identification shows that the NO3- and SO42- of rainwater are controlled by anthropogenic sources, and the agricultural activities and natural processes are the main sources of NH4+, while the part of Ca2+, K+ and Mg2+ originate from crustal inputs. The higher concentration of alkaline ions is a significant contributor to reduce rainwater acidification. Based on the reported data of previous literature, the stable Ca isotopes (delta(44)/Ca-40) are applied to decipher the different sources. The three sources include as the carbonate weathering (low delta(44)/Ca-40 - 0.6%, low NH4+/Ca2+ and NO3-/Ca2+ ratios), the silicate weathering which refers to the dissolvable soil dirt minerals from both local and the surrounding place (high delta(44)/Ca-40 - 0.9%, low NH4+/Ca2+ and NO3-/Ca2+ ratios), and the anthropogenic source (mainly from fertilizers, moderate delta(44)/Ca-40 - 0.8%, high NH4+/Ca2+ and NO3-/Ca2+ ratios). This study highlights the broader applicability of the chemical and Ca isotopic method in tracing the sources (particularly agricultural sources) of rainwater solute and atmospheric mixing/trapping processes, and can also provide additional insight regarding the elemental biogeochemical cycle in karst areas.

入藏号: WOS:000514929300017

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Agriculture, Multidisciplinary; Ecology; Environmental Sciences

ISSN: 0167-8809

eISSN: 1873-2305

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 24 条，共 381 条

标题: Comparative study between sequential solvent-extraction and multiple isothermal stages pyrolysis: A case study on Eocene Shahejie Formation shales, Dongying Depression, East China

作者: Zhang, H (Zhang, Hong); Huang, HP (Huang, Haiping); Li, Z (Li, Zheng); Liu, M (Liu, Mei)

来源出版物: FUEL 卷: 263 文献号: 116591 DOI: 10.1016/j.fuel.2019.116591 出版年: MAR 1 2020

Web of Science 核心合集中的 "被引频次": 14

被引频次合计: 14

摘要: Chemical and thermal extractions were performed on a suite of 23 shale core samples, from the Eocene Shahejie Formation of the Dongying Depression, East China, to investigate the Oil-In-Place of shales and the difference among various assessment approaches. The novel multiple isothermal stages (MIS) pyrolysis [Romero-Sarmiento et al., AAPG European Regional Conference & Exhibition. Lisbon; 2015] derives four peaks characterizing the light, light to medium, heavier- and non- hydrocarbons, and the pyrolyzed hydrocarbon (i.e., hydrocarbons derived from thermal decomposition of kerogen), respectively. Compared with standard Rock-Eval pyrolysis on OIP estimation, the MIS pyrolysis provides more specific information concerning gross compositions and physical status of oils, which reduces the impact of the frequently-occurred carryover effect to a certain extent. Systematic variations of molecular compositions especially the light vs. heavy n-alkanes have been elucidated. The mobile oil estimated from MIS pyrolysates is very close to solvent extractable oils (i.e., bitumen). Abnormal increase of pyrolysis hydrocarbons after initial extraction is attributed to the mineral matrix effect. This study demonstrated discrepancies between various approaches in assessment of thermo-vaporizable and pyrolysis hydrocarbons within shale reservoirs and triggered a re-understanding on the application of pyrolysis parameters in shale oil systems.

入藏号: WOS:000504834400022

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0016-2361

eISSN: 1873-7153

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 25 条，共 381 条

标题: One-step synthesis of novel K+ and cyano groups decorated triazine-/heptazine-based g-C3N4 tubular homojunctions for boosting photocatalytic H-2 evolution

作者: Yang, J (Yang, Jian); Liang, YJ (Liang, Yujun); Li, K (Li, Kai); Yang, G (Yang, Gui); Wang, K (Wang, Kun); Xu, R (Xu, Rui); Xie, XJ (Xie, Xianjun)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 262 文献号: 118252 DOI: 10.1016/j.apcatb.2019.118252 出版年: MAR 2020

Web of Science 核心合集中的 "被引频次": 15

被引频次合计: 15

摘要: Constructing homojunctions with different morphologies, exposing facets, crystal phases or semiconductor types in a photocatalyst is an essential approach to boost the photoactivity. Herein, the g-C3N4 phase homojunctions decorated with cyano groups and K+ were designed and successfully synthesized via only adjusting the reaction temperatures within a facile one-step molten salt route. Such unique junctions were constructed through the overgrowth of triazine-based g-C3N4 nanoparticles embedded in the surface and inner wall of heptazine-based g-C3N4 hollow tubes. Benefited from the multiple advantages of high specific surface area, unique tubular structure, enhanced visible light absorption, and fast charge transfer and separation, the triazine-/heptazine-based g-C3N4 homojunctions drastically enhanced the photocatalytic hydrogen production performance, achieving a 2 and 12-fold improvement than the pristine g-C3N4 microtube and bulk g-C3N4, respectively. This study provides an in-depth insight into the design and fabrication of other g-C3N4 -based photocatalysts for more efficient solar energy conversion applications.

入藏号: WOS:000501613700016

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 26 条，共 381 条

标题: Enhanced piezoelectric-effect-assisted photoelectrochemical performance in ZnO modified with dual cocatalysts

作者: Zhang, SC (Zhang, Shaoce); Liu, ZF (Liu, Zhifeng); Ruan, MN (Ruan, Mengnan); Guo, ZG (Guo, Zhengang); E, L (E, Lei); Zhao, W (Zhao, Wei); Zhao, D (Zhao, Dan); Wu, XF (Wu, Xiangfeng); Chen, DM (Chen, Daimei)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 262 文献号: 118279 DOI: 10.1016/j.apcatb.2019.118279 出版年: MAR 2020

Web of Science 核心合集中的 "被引频次": 21

被引频次合计: 21

摘要: Promising strategies are of great significance for designing photoelectrodes with high charge separation efficiency and low charge recombination rate in photoelectrochemical (PEC) water splitting. In this paper, we firstly propose a method of combining piezoelectric effect with photoelectrochemical cell by utilizing of direct band gap metal-oxide semiconductor ZnO as the photoanode. After introducing piezoelectric effect resulted from ultrasonic vibrations, the current density value reaches 0.45 mA.cm(-2) at 1.23 V-RHE by the production of strain-induced charge and the enhancement of the electric field, 1.7 times higher than that of ZnO without ultrasonic vibrations (0.27 mA.cm(-2) at 1.23 V-RHE). The deposition of spatially separated dual cocatalysts, of which the bottom Pt act as electron collection and transport layer while the outmost Co-Pi serve as hole-transfer layer, further facilitates the separation of charge (strain-induced and photogenerated) and accelerates the reaction kinetics. The utilization of dual cocatalysts efficiently improves the performance of photoanodes and leads to a current density of 0.80 mA.cm(-2) at 1.23 V-RHE, 1.8 and 3.0 times higher than the values of ZnO with and without ultrasonic vibrations. The strategy provides a promising method and idea for the manufacture of practical and high-performance electrodes.

入藏号: WOS:000501613700024

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 27 条，共 381 条

标题: Effective adsorption of diclofenac sodium from neutral aqueous solution by low-cost lignite activated cokes

作者: Wu, LY (Wu, Liyuan); Du, CX (Du, Chunxiao); He, J (He, Juan); Yang, ZC (Yang, Zhichao); Li, HY (Li, Haiyan)

来源出版物: JOURNAL OF HAZARDOUS MATERIALS 卷: 384 文献号: 121284 DOI: 10.1016/j.jhazmat.2019.121284 出版年: FEB 15 2020

Web of Science 核心合集中的 "被引频次": 11

被引频次合计: 11

摘要: Activated cokes have attracted great interest inwater treatment to remove organic pollutants due to their low cost and specific textural properties. In this study, adsorptive removal of diclofenac sodium (DCF) from neutral aqueous solution by available lignite activated cokes (LACs) was reported for the first time. Diclofenac sodium could be quickly removed from aqueous solution by LAC-2, with the maximum Langmuir adsorption capacity q(m) of 224 mg/g at pH 6.5. Characterization results (including scanning electron microscopy, transmission electron microscopy, elemental analyses, Boehm titration, N-2 adsorption-desorption isotherms and Fourier transform infrared spectroscopy) and a series of adsorption kinetics, adsorption isotherms model studies revealed that high porosity with developed macro- and micropore structures on LAC-2, as well as high content of phenolic groups, could obviously enhance the DCF adsorption capacity and rate. Moreover, LAC-2 showed high affinity towards DCF at low concentrations, as well as good reusability after three adsorption-desorption cycles. pH effect studies revealed that hydrogen-bonding interaction plays an important role during adsorption, accompanied with certain contribution from electrostatic interaction and pi-pi interaction. This study indicates the promising potential of LAC-2 as an efficient, low-cost and recyclable material for DCF removal from water bodies.

入藏号: WOS:000535561100067

PubMed ID: 31628061

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Environmental; Environmental Sciences

ISSN: 0304-3894

eISSN: 1873-3336

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 28 条，共 381 条

标题: Biochar-supported nanoscale zero-valent iron as an efficient catalyst for organic degradation in groundwater

作者: Li, Z (Li, Zhe); Sun, YQ (Sun, Yuqing); Yang, Y (Yang, Yang); Han, YT (Han, Yitong); Wang, TS (Wang, Tongshuai); Chen, JW (Chen, Jiawei); Tsang, DCW (Tsang, Daniel C. W.)

来源出版物: JOURNAL OF HAZARDOUS MATERIALS 卷: 383 文献号: 121240 DOI: 10.1016/j.jhazmat.2019.121240 出版年: FEB 5 2020

Web of Science 核心合集中的 "被引频次": 45

被引频次合计: 46

摘要: High-efficiency and cost-effective catalysts are critical to completely mineralization of organic contaminants for in-situ groundwater remediation via advanced oxidation processes (AOPs). The engineered biochar is a promising method for waste biomass utilization and sustainable remediation. This study engineers maize stalk (S)and maize cob (C)-derived biochars (i.e., SB300, SB600, CB300, and CB600, respectively) with oxygen-containing functional groups as a carbon-based support for nanoscale zero-valent iron (nZVI). Morphological and physiochemical characterization showed that nZVI could be impregnated within the framework of the synthesized Fe-CB600 composite, which exhibited the largest surface area, pore volume, iron loading capacity, and Fe-0 proportion. Superior degradation efficiency (100% removal in 20 min) of trichloroethylene (TCE, 0.1 mM) and fast pseudo-first-order kinetics (k(obs) =22.0 ( -1)) were achieved via peroxymonosulfate (PMS, 5 mM) activation by the Fe-CB600 (1 g L-1) under groundwater condition (bicarbonate buffer solution at pH = 8.2). Superoxide radical and singlet oxygen mediated by Fe-0 and oxygen-containing group (i.e., C=O) were demonstrated as the major reactive oxygen species (ROSs) responsible for TCE dechlorination. The effectiveness and mechanism of the Fe/C composites for rectifying organic-contaminated groundwater were depicted in this study.

入藏号: WOS:000502887900089

PubMed ID: 31563767

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Environmental; Environmental Sciences

ISSN: 0304-3894

eISSN: 1873-3336

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 29 条，共 381 条

标题: Jute: A Potential Candidate for Phytoremediation of Metals-A Review

作者: Saleem, MH (Saleem, Muhammad Hamzah); Ali, S (Ali, Shafaqat); Rehman, M (Rehman, Muzammal); Hasanuzzaman, M (Hasanuzzaman, Mirza); Rizwan, M (Rizwan, Muhammad); Irshad, S (Irshad, Sana); Shafiq, F (Shafiq, Fahad); Iqbal, M (Iqbal, Muhammad); Alharbi, BM (Alharbi, Basmah M.); Alnusaire, TS (Alnusaire, Taghreed S.); Qari, SH (Qari, Sameer H.)

来源出版物: PLANTS-BASEL 卷: 9 期: 2 文献号: 258 DOI: 10.3390/plants9020258 出版年: FEB 2020

Web of Science 核心合集中的 "被引频次": 23

被引频次合计: 23

摘要: Jute (Corchorus capsularis) is a widely cultivated fibrous species with important physiological characteristics including biomass, a deep rooting system, and tolerance to metal stress. Furthermore, Corchorus species are indigenous leafy vegetables and show phytoremediation potential for different heavy metals. This species has been used for the phytoremediation of different toxic pollutants such as copper (Cu), cadmium (Cd), zinc (Zn), mercury (Hg) and lead (Pb). The current literature highlights the physiological and morphological characteristics of jute that are useful to achieve successful phytoremediation of different pollutants. The accumulation of these toxic heavy metals in agricultural regions initiates concerns regarding food safety and reductions in plant productivity and crop yield. We discuss some innovative approaches to increase jute phytoremediation using different chelating agents. There is a need to remediate soils contaminated with toxic substances, and phytoremediation is a cheap, effective, and in situ alternative, and jute can be used for this purpose.

入藏号: WOS:000519248200069

PubMed ID: 32079368

出版商: MDPI

出版商地址: ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND

Web of Science 类别: Plant Sciences

eISSN: 2223-7747

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 30 条，共 381 条

标题: Landslide Susceptibility Prediction Based on Remote Sensing Images and GIS: Comparisons of Supervised and Unsupervised Machine Learning Models

作者: Chang, ZL (Chang, Zhilu); Du, Z (Du, Zhen); Zhang, F (Zhang, Fan); Huang, FM (Huang, Faming); Chen, JW (Chen, Jiawu); Li, WB (Li, Wenbin); Guo, ZZ (Guo, Zizheng)

来源出版物: REMOTE SENSING 卷: 12 期: 3 文献号: 502 DOI: 10.3390/rs12030502 出版年: FEB 2020

Web of Science 核心合集中的 "被引频次": 16

被引频次合计: 17

摘要: Landslide susceptibility prediction (LSP) has been widely and effectively implemented by machine learning (ML) models based on remote sensing (RS) images and Geographic Information System (GIS). However, comparisons of the applications of ML models for LSP from the perspectives of supervised machine learning (SML) and unsupervised machine learning (USML) have not been explored. Hence, this study aims to compare the LSP performance of these SML and USML models, thus further to explore the advantages and disadvantages of these ML models and to realize a more accurate and reliable LSP result. Two representative SML models (support vector machine (SVM) and CHi-squared Automatic Interaction Detection (CHAID)) and two representative USML models (K-means and Kohonen models) are respectively used to scientifically predict the landslide susceptibility indexes, and then these prediction results are discussed. Ningdu County with 446 recorded landslides obtained through field investigations is introduced as case study. A total of 12 conditioning factors are obtained through procession of Landsat TM 8 images and high-resolution aerial images, topographical and hydrological spatial analysis of Digital Elevation Modeling in GIS software, and government reports. The area value under the curve of receiver operating features (AUC) is applied for evaluating the prediction accuracy of SML models, and the frequency ratio (FR) accuracy is then introduced to compare the remarkable prediction performance differences between SML and USML models. Overall, the receiver operation curve (ROC) results show that the AUC of the SVM is 0.892 and is slightly greater than the AUC of the CHAID model (0.872). The FR accuracy results show that the SVM model has the highest accuracy for LSP (77.80%), followed by the CHAID model (74.50%), the Kohonen model (72.8%) and the K-means model (69.7%), which indicates that the SML models can reach considerably better prediction capability than the USML models. It can be concluded that selecting recorded landslides as prior knowledge to train and test the LSP models is the key reason for the higher prediction accuracy of the SML models, while the lack of a priori knowledge and target guidance is an important reason for the low LSP accuracy of the USML models. Nevertheless, the USML models can also be used to implement LSP due to their advantages of efficient modeling processes, dimensionality reduction and strong scalability.

入藏号: WOS:000515393800161

出版商: MDPI

出版商地址: ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND

Web of Science 类别: Remote Sensing

eISSN: 2072-4292

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 31 条，共 381 条

标题: A holistic model for the origin of orogenic gold deposits and its implications for exploration

作者: Groves, DI (Groves, David I.); Santosh, M (Santosh, M.); Deng, J (Deng, Jun); Wang, QF (Wang, Qingfei); Yang, LQ (Yang, Liqiang); Zhang, L (Zhang, Liang)

来源出版物: MINERALIUM DEPOSITA 卷: 55 期: 2 特刊: SI 页: 275-292 DOI: 10.1007/s00126-019-00877-5 出版年: FEB 2020

Web of Science 核心合集中的 "被引频次": 40

被引频次合计: 40

摘要: The term orogenic gold deposits has been widely accepted, but there has been continuing debate on their genesis. Early syn-sedimentary or syn-volcanic models and hydrothermal meteoric-fluid models are now invalid. Magmatic-hydrothermal models fail because of the lack of consistent spatially associated granitic intrusions and inconsistent temporal relationships. The most plausible models involve metamorphic fluids, but the source of these fluids is equivocal. Intra-basin sources within deeper segments of the hosting supracrustal successions, the underlying continental crust, subducted oceanic lithosphere with its overlying sediment wedge, and metasomatized lithosphere are all potential sources. Several features of Precambrian orogenic gold deposits are inconsistent with derivation from a continental metamorphic-fluid source. These include the presence of hypozonal deposits in amphibolite-facies domains, their anomalous multiple sulfur isotopic compositions, and problems of derivation of gold-related elements from devolatilization of dominant basalts in the sequences. The Phanerozoic deposits are largely described as hosted in greenschist-facies domains, consistent with supracrustal devolatilization models. A notable exception is the Jiaodong gold deposits of China, where ca. 120-Ma gold deposits are hosted in Precambrian crust that was metamorphosed over 2000 million years prior to gold mineralization. Other deposits in China are comparable to those in the Massif Central and elsewhere in France, in that they are hosted in amphibolite-facies domains or clearly post-date regional metamorphic events imposed on hosting supracrustal sequences. If all orogenic gold deposits have a common genesis, the only realistic source of fluid and gold is from devolatilization of a subducted oceanic slab with its overlying gold-bearing sulfide-rich sedimentary package, or the associated metasomatized mantle wedge, with CO2 released during decarbonation and S- and ore-related elements released from transformation of pyrite to pyrrhotite at about 500 degrees C. Although this model satisfies all geological, geochronological, isotopic, and geochemical constraints, and is consistent with limited computer-based modeling of fluid release from subduction zones, the precise mechanisms of fluid flux are model-driven and remain uncertain. From an exploration viewpoint, the model re-emphasizes the ubiquitous occurrence of orogenic gold deposits in subduction-related orogenic belts and importance of continental-scale lithosphere-tapping fault and shear zones to focus large volumes of auriferous fluid. It confirms the importance of the consistent spacing between world-class deposits, broadly equivalent to the depth of the Moho, as derived from empirical observations.

入藏号: WOS:000515255900007

出版商: SPRINGER

出版商地址: ONE NEW YORK PLAZA, SUITE 4600, NEW YORK, NY, UNITED STATES

Web of Science 类别: Geochemistry & Geophysics; Mineralogy

ISSN: 0026-4598

eISSN: 1432-1866

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 32 条，共 381 条

标题: Early orogenic gold mineralization event in the West Qinling related to closure of the Paleo-Tethys Ocean - Constraints from the Ludousou gold deposit, central China

作者: Yu, HC (Yu, Hao-Cheng); Qiu, KF (Qiu, Kun-Feng); Nassif, MT (Nassif, Miguel Tavares); Geng, JZ (Geng, Jian-Zhen); Sai, SX (Sai, Sheng-Xun); Duo, DW (Duo, De-Wen); Huang, YQ (Huang, Ya-Qi); Wang, J (Wang, Jie)

来源出版物: ORE GEOLOGY REVIEWS 卷: 117 文献号: 103217 DOI: 10.1016/j.oregeorev.2019.103217 出版年: FEB 2020

Web of Science 核心合集中的 "被引频次": 13

被引频次合计: 13

摘要: The West Qinling Orogen experienced a complex orogenic history and developed related orogenic gold deposits. Most known orogenic gold deposits in West Qinling are hosted by brittle to ductile shear zones and mainly formed during 220-190 Ma. The Ludousou gold deposit, located in the northwestemmost segment of West Qinling, has breccia gold ores controlled by E-W, NE-, NW-, and N-S trending faults, and is hosted by tuff and quartz diorite porphyry. Uranium-Pb zircon investigations indicate that tuff and quartz diorite porphyry were emplaced at 252.9 +/- 4.1 Ma and 247.0 +/- 2.2 Ma. Magmatic apatites from the same quartz diorite porphyry crystallized at 243.5 +/- 4.8 Ma indicating a rapid cooling history. Hydrothermal sericite coexisting with gold-bearing pyrite and arsenopyrite from mineralized quartz diorite porphyry provided Ar-40/Ar-39 plateau and inverse isochron ages of 235.68 +/- 0.29 Ma and 235.61 +/- 0.41 Ma. Hydrothermal apatite separated from the same mineralized quartz diorite porphyry yielded concordant U-Pb age of 235.7 +/- 4.9 Ma. Such data bracketed that the Ludousou gold mineralization event occurred at ca. 236 Ma postdating the 252-247 Ma magmatism by approximately 8-11 million years. Combined present field observations and geochronological data with sulfur isotopic and fluid inclusion investigations in literatures, we therefore propose that ore-forming fluids may not be derived from ore-hosting tuff and quartz diorite porphyry, and such rapid cooled host-rocks might even provide little heat source during ore formation. The Ludousou gold deposit is best classified as an orogenic gold deposit, and probably can extend the orogenic gold mineralization event in the West Qinling related to closure of the Paleo-Tethys Ocean tracing back to ca. 236 Ma.

入藏号: WOS:000515206900004

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geology; Mineralogy; Mining & Mineral Processing

ISSN: 0169-1368

eISSN: 1872-7360

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 33 条，共 381 条

标题: Effects of agricultural abandonment on soil aggregation, soil organic carbon storage and stabilization: Results from observation in a small karst catchment, Southwest China

作者: Liu, M (Liu, Man); Han, GL (Han, Guilin); Zhang, Q (Zhang, Qian)

来源出版物: AGRICULTURE ECOSYSTEMS & ENVIRONMENT 卷: 288 文献号: 106719 DOI: 10.1016/j.agee.2019.106719 出版年: FEB 1 2020

Web of Science 核心合集中的 "被引频次": 35

被引频次合计: 35

摘要: Soil organic carbon (SOC) storage and stabilization under land-use change, including agricultural abandonment, are critical for the recuperation of soil productivity and feedback to climate change. A space-for-time substitution approach was applied to investigate the responses of soil aggregation, SOC storage and stabilization to agricultural abandonment in a small karst catchment in Southwest China. Soil aggregate distribution, SOC concentration and delta C-13 composition in bulk soils and different-sized aggregates in soil profiles under cropland, abandoned cropland and native vegetation land were determined. The results showed that SOC storage and soil aggregation were significantly reduced in the surface soils of croplands compared to those under native vegetation; SOC storage was slowly restored in 3-8 years abandoned cropland, but soil aggregation was rapidly recovered. The rapidly recovered macro-aggregates controlled the recuperation of SOC storage after agricultural abandonment because most SOC (64%-83%) was sequestrated by macro-aggregates. The relationships between SOC concentrations and delta C-13 values in different-sized aggregates of surface soils could indicate a change in SOC stabilization under land-use change. In this study, SOC stabilization was gradually enhanced following agricultural abandonment. These results suggest that soil aggregation, SOC storage and stabilization are recovered following agricultural abandonment in the karst region.

入藏号: WOS:000500217500010

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Agriculture, Multidisciplinary; Ecology; Environmental Sciences

ISSN: 0167-8809

eISSN: 1873-2305

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 34 条，共 381 条

标题: Global projections of future urban land expansion under shared socioeconomic pathways

作者: Chen, GZ (Chen, Guangzhao); Li, X (Li, Xia); Liu, XP (Liu, Xiaoping); Chen, YM (Chen, Yimin); Liang, X (Liang, Xun); Leng, JY (Leng, Jiye); Xu, XC (Xu, Xiaocong); Liao, WL (Liao, Weilin); Qiu, YA (Qiu, Yue'an); Wu, QL (Wu, Qianlian); Huang, KN (Huang, Kangning)

来源出版物: NATURE COMMUNICATIONS 卷: 11 期: 1 文献号: 537 DOI: 10.1038/s41467-020-14386-x 出版年: JAN 27 2020

Web of Science 核心合集中的 "被引频次": 18

被引频次合计: 20

摘要: Despite its small land coverage, urban land and its expansion have exhibited profound impacts on global environments. Here, we present the scenario projections of global urban land expansion under the framework of the shared socioeconomic pathways (SSPs). Our projections feature a fine spatial resolution of 1km to preserve spatial details. The projections reveal that although global urban land continues to expand rapidly before the 2040s, China and many other Asian countries are expected to encounter substantial pressure from urban population decline after the 2050s. Approximately 50-63% of the newly expanded urban land is expected to occur on current croplands. Global crop production will decline by approximately 1-4%, corresponding to the annual food needs for a certain crop of 122-1389 million people. These findings stress the importance of governing urban land development as a key measure to mitigate its negative impacts on food production.

入藏号: WOS:000512539500007

PubMed ID: 31988288

出版商: NATURE PUBLISHING GROUP

出版商地址: MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

Web of Science 类别: Multidisciplinary Sciences

ISSN: 2041-1723

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 35 条，共 381 条

标题: Land use transitions and the associated impacts on ecosystem services in the Middle Reaches of the Yangtze River Economic Belt in China based on the geo-informatic Tupu method

作者: Chen, WX (Chen, Wanxu); Zhao, HB (Zhao, Hongbo); Li, JF (Li, Jiangfeng); Zhu, LJ (Zhu, Lijun); Wang, ZY (Wang, Zheye); Zeng, J (Zeng, Jie)

来源出版物: SCIENCE OF THE TOTAL ENVIRONMENT 卷: 701 文献号: 134690 DOI: 10.1016/j.scitotenv.2019.134690 出版年: JAN 20 2020

Web of Science 核心合集中的 "被引频次": 18

被引频次合计: 19

摘要: Rapid urbanization in China has greatly exacerbated land use transitions (LUTs), which seriously threaten the ecosystem. The existing literature lacks information on the spatio-temporal analysis of LUTs, and assessments of ecosystem services remain incomplete. This lack of information may limit the formation and implementation of landscape plans and ecologically oriented policies. This study attempts to fill this gap by analysing the geographic features of LUTs with the geo-informatic Tupu method and exploring the responses of ecosystem services to LUTs. A newly revised benefit transfer method that utilizes the land use/land cover change data derived from the Landsat Enhanced Thematic Mapper (ETM) in the Middle Reaches of the Yangtze River Economic Belt (MRYREB) is implemented. The results indicate that the area of construction land continued to increase markedly, while the area of cultivated land declined continuously from 1995 to 2015. This increase in construction land was mainly derived from the occupation of cultivated land. The Tupu units of "forestland > cultivated land," "cultivated land > forestland," "cultivated land -> water area," and "water area -> cultivated land" were the dominant driving forces of the changes in ecosystem services value (ESV) in the MRYREB. Hotspots of ESV changes were mainly located in the surrounding mountainous areas during 1995-2005 and 2005-2010, while the coldspots during 2010-2015 were mainly located in the plains. The findings in this study have important implications for ecosystem conservation, ecological function zoning, ecological compensation decision-making, and related land development in the MRYREB. (C) 2019 Elsevier B.V. All rights reserved.

入藏号: WOS:000498801400037

PubMed ID: 31704410

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Environmental Sciences

ISSN: 0048-9697

eISSN: 1879-1026

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 36 条，共 381 条

标题: A high-resolution summary of Cambrian to Early Triassic marine invertebrate biodiversity

作者: Fan, JX (Fan, Jun-xuan); Shen, SZ (Shen, Shu-zhong); Erwin, DH (Erwin, Douglas H.); Sadler, PM (Sadler, Peter M.); MacLeod, N (MacLeod, Norman); Cheng, QM (Cheng, Qiu-ming); Hou, XD (Hou, Xu-dong); Yang, J (Yang, Jiao); Wang, XD (Wang, Xiang-dong); Wang, Y (Wang, Yue); Zhang, H (Zhang, Hua); Chen, X (Chen, Xu); Li, GX (Li, Guo-xiang); Zhang, YC (Zhang, Yi-chun); Shi, YK (Shi, Yu-kun); Yuan, DX (Yuan, Dong-xun); Chen, Q (Chen, Qing); Zhang, LN (Zhang, Lin-na); Li, C (Li, Chao); Zhao, YY (Zhao, Ying-ying)

来源出版物: SCIENCE 卷: 367 期: 6475 页: 273-+ DOI: 10.1126/science.aax4953 出版年: JAN 17 2020

Web of Science 核心合集中的 "被引频次": 19

被引频次合计: 23

摘要: One great challenge in understanding the history of life is resolving the influence of environmental change on biodiversity. Simulated annealing and genetic algorithms were used to synthesize data from 11,000 marine fossil species, collected from more than 3000 stratigraphic sections, to generate a new Cambrian to Triassic biodiversity curve with an imputed temporal resolution of 26 14,9 thousand years. This increased resolution clarifies the timing of known diversification and extinction events. Comparative analysis suggests that partial pressure of carton dioxide (Pco(2)) is the only environmental factor that seems to display a secular pattern similar to that of biodiversity, but this similarity was not confirmed when autocorrelation within that time series was analyzed by detrending These results demonstrate that fossil data can provide the temporal and taxonomic resolutions necessary to test (paleo)biological hypotheses at a level of detail approaching those of long-term ecological analyses.

入藏号: WOS:000509802700033

PubMed ID: 31949075

出版商: AMER ASSOC ADVANCEMENT SCIENCE

出版商地址: 1200 NEW YORK AVE, NW, WASHINGTON, DC 20005 USA

Web of Science 类别: Multidisciplinary Sciences

ISSN: 0036-8075

eISSN: 1095-9203

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 37 条，共 381 条

标题: PM2.5 Pollution Modulates Wintertime Urban Heat Island Intensity in the Beijing-Tianjin-Hebei Megalopolis, China

作者: Yang, YJ (Yang, Yuanjian); Zheng, ZF (Zheng, Zuofang); Yim, SYL (Yim, Steve Y. L.); Roth, M (Roth, Matthias); Ren, GY (Ren, Guoyu); Gao, ZQ (Gao, Zhiqiu); Wang, TJ (Wang, Tijian); Li, QX (Li, Qingxiang); Shi, CN (Shi, Chune); Ning, GC (Ning, Guicai); Li, YB (Li, Yubin)

来源出版物: GEOPHYSICAL RESEARCH LETTERS 卷: 47 期: 1 文献号: e2019GL084288 DOI: 10.1029/2019GL084288 出版年: JAN 16 2020

Web of Science 核心合集中的 "被引频次": 16

被引频次合计: 16

摘要: Heavy PM2.5 (particulate matter with aerodynamic diameter equal to or less than 2.5 mu m) pollution and urban heat island (UHI) pose increasing threats to human health and living environment in populated cities. However, how PM2.5 pollution affects the UHI intensity (UHII) has not been fully understood. The impacts of PM2.5 on the wintertime UHII in the Beijing-Tianjin-Hebei megalopolis of China are explored during 2013-2017. The results show that the UHII at the time of daily maximum/minimum temperature (UHIImax/UHIImin) exhibits a decreasing/increasing tendency as PM2.5 concentration increases, causing a continuous decrease in the diurnal temperature range. These effects are mediated via aerosol-radiation interaction (aerosol-cloud interaction) under clear-sky (cloudy) condition. The changes in PM2.5 concentration further cause different relative trends of UHII(ma)x/UHIImin/diurnal temperature range across different cities in the Beijing-Tianjin-Hebei region, which are likely related to the differences in both the PM2.5 composition and city size. This study provides insights on how air pollution affects urban climate and would help to design effective mitigation strategies.

Plain Language Summary A detailed understanding of the relationship between PM2.5 (particulate matter with aerodynamic diameter equal to or less than 2.5 mu m) and the urban heat island (UHI) effect is significant for climate change adaption, planning, and sustainable development in urban regions. While the Beijing-Tianjin-Hebei (BTH) megalopolis of China is among the areas with the highest population densities and fastest urbanization rates in the world, the impacts of PM2.5 pollution on UHI, along with their regional differences in the BTH megalopolis, remain unclear. This study demonstrates that different PM2.5 concentrations in the BTH region pose various influences on the UHI intensities and their change rates in different cities of varying sizes. The UHI intensities during daytime and nighttime, respectively, exhibit weakening and strengthening tendency as PM2.5 concentration increases. These effects are mediated via aerosol-radiation interaction under clear-sky condition and aerosol-cloud interaction in cloudy weather. The relative changes in the UHI magnitudes were mainly determined by PM2.5 composition and city size. The asymmetrical influences of PM2.5 on the daytime and nighttime UHI intensities caused continuous decreases in the diurnal temperature ranges in the urban areas as the pollution level increased. Our study improves the understanding of urban climate affected by air pollution and provides a scientific basis for the mitigation of UHI impacts.

入藏号: WOS:000513983400001

出版商: AMER GEOPHYSICAL UNION

出版商地址: 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0094-8276

eISSN: 1944-8007

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 38 条，共 381 条

标题: A ratiometric optical thermometer with multi-color emission and high sensitivity based on double perovskite LaMg0.402Nb0.598O3: Pr3+ thermochromic phosphors

作者: Zhang, H (Zhang, Hang); Gao, ZY (Gao, Zhiyu); Li, GG (Li, Guogang); Zhu, YL (Zhu, Yingli); Liu, SQ (Liu, Shiqi); Li, K (Li, Kai); Liana, YJ (Liana, Yujun)

来源出版物: CHEMICAL ENGINEERING JOURNAL 卷: 380 文献号: 122491 DOI: 10.1016/j.cej.2019.122491 出版年: JAN 15 2020

Web of Science 核心合集中的 "被引频次": 22

被引频次合计: 22

摘要: Currently, non-contact fluorescence intensity ratio (FIR)-based luminescent thermometry has been extensively attracted great attention for its promising applications in electromagnetic field, micro-temperature field and thermally harsh environments. In this work, the double-perovskite LaMg0.402Nb0.598O3: Pr3+ (LMNO: Pr3+) thermometric phosphor is firstly designed and successfully synthesized via a high-temperature solid-state method. Under 450 nm excitation, the as-prepared samples simultaneously exhibit blue emission (P-3(0) -> H-3(4)), green emission (P-3(1 )-> H-3(4)) and red emission (D-1(2) -> H-3(4), P-3(0) -> F- 3(2)) of Pr3+. They present different dependence on the temperature due to the intervalence charge transfer state (IVCT). Accordingly, the four FIR models between P-3(1 )-> H-3(4) and P-3(0 )-> H-3(4) (G/B), P-3(1 )-> H-3(4) and P-3(0) -> F-3(2) (G/R2), D-1(2) -> H-3(4) and P-3(0) -> H-3(4) (R1/B) and D-1(2) -> H-3(4) and P-3(0) -> F- 3(2) (R1/R2) are used as temperature detecting signal in the range of 298-523 K, and the maximum absolute and relative sensitivity of LaMg0.402Nb0.598O3: 1.2% Pr3+ sample reached 0.0597K(-1) at 523 K and 0.7250% K-1 at 473 K, respectively. Excellent temperature sensing features are also demonstrated in the LaMg0.402Nb0.598O3: 0.3% Pr3+ and LaMg0.402Nb0.598O3: 2.0% Pr3+ samples. Except for high sensitivity for temperature sensing, the designed Pr3+-doped double-perovskite materials also realize the self-calibration by simultaneous monitoring of four models of FIR. Moreover, after five cycles, the relative luminescence intensity of LaMg0.402Nb0.598O3: 1.2% Pr3+ sample remains stable. These results indicate that LaMg0.402Nb0.598O3: Pr3+ phosphors have great promising application as self-calibrated optical temperature sensors.

入藏号: WOS:000494815600075

出版商: ELSEVIER SCIENCE SA

出版商地址: PO BOX 564, 1001 LAUSANNE, SWITZERLAND

Web of Science 类别: Engineering, Environmental; Engineering, Chemical

ISSN: 1385-8947

eISSN: 1873-3212

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 39 条，共 381 条

标题: Facile fabrication nano-sized red phosphorus with enhanced photocatalytic activity by hydrothermal and ultrasonic method

作者: Ren, ZP (Ren, Zhenpeng); Li, DH (Li, Donghui); Xue, Q (Xue, Qiang); Li, JJ (Li, Jiaojiao); Sun, YW (Sun, Yuewei); Zhang, RQ (Zhang, Ruiqin); Zhai, YP (Zhai, Yunpu); Liu, YG (Liu, Yonggang)

来源出版物: CATALYSIS TODAY 卷: 340 特刊: SI 页: 115-120 DOI: 10.1016/j.cattod.2018.09.029 出版年: JAN 15 2020

Web of Science 核心合集中的 "被引频次": 11

被引频次合计: 13

摘要: Red phosphorus, as a metal free elemental photocatalyst, shows great potential applications for overall water splitting and environmental pollutants degradation. Facile fabrication of nano-sized and uniformly distributed phosphorus material is still challenging. Herein, we develop a facile approach to fabricate red phosphorus with particle size less than 10 nm through a hydrothermal and ultrasonic method. The hydrothermal and ultrasonic conditions were optimized. The red phosphorus sample hydrothermally treated at 200 degrees C for 12 h and then ultrasonically treated for 2 h at room temperature showed the best photocatalytic performance, which can effectively degrade Rhodamine B (RhB) and p-nitrophenol under visible light irradiation. The origin of the improved activity was attributed to the enhanced physical adsorption capacity, increasing active reaction sites and highly effective charge separation.

入藏号: WOS:000491876500015

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Applied; Chemistry, Physical; Engineering, Chemical

ISSN: 0920-5861

eISSN: 1873-4308

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 40 条，共 381 条

标题: Bi4NbO8Cl {001} nanosheets coupled with g-C3N4 as 2D/2D heterojunction for photocatalytic degradation and CO2 reduction

作者: Xu, Y (Xu, Yue); You, Y (You, Yong); Huang, HW (Huang, Hongwei); Guo, YX (Guo, Yuxi); Zhang, YH (Zhang, Yihe)

来源出版物: JOURNAL OF HAZARDOUS MATERIALS 卷: 381 文献号: 121159 DOI: 10.1016/j.jhazmat.2019.121159 出版年: JAN 5 2020

Web of Science 核心合集中的 "被引频次": 25

被引频次合计: 25

摘要: Photocatalytic activity is largely restricted by insufficient photoabsorption and intense recombination between charge carriers. Here, we first synthesized Bi4NbO8Cl nanosheets with {001} exposing facets by a molten-salt growth method, which shows largely promoted photocatalytic performance for the degradation of tetracycline (TC) and bisphenol A (BPA) in comparison with Bi4NbO8Cl particles obtained by solid-state reaction. The 2D/2D Bi4NbO8Cl/g-C3N4 heterojunction photocatalysts were then fabricated via high-energy ball-milling and post-sintering to realize intimate interfacial interaction. The photocatalytic activity of all the Bi4NbO8Cl/g-C3N4 composites largely enhances compared to Bi4NbO8Cl nanosheets and g-C3N4, also far exceeding the mechanically-mixed Bi4NbO8Cl nanosheets and g-C3N4. The impact of different reaction parameters on the photocatalytic degradation activities was investigated, including catalyst concentration, pH value and TC concentration. In addition, Bi4NbO8Cl/g-C3N4 also presents improved photocatalytic CO2 reduction activity for CO production. The large enhancement on photocatalytic activity of Bi4NbO8Cl/g-C3N4 composites is owing to the synergistic effect of favorable 2D/2D structure and construction of type II heterojunction with intimate interfacial interaction, thus boosting the charge separation. The formation of type II heterojunction was evidenced by selective photo-deposition of Pt and MnOx, which demonstrate that the reductive sites and oxidative sites are on Bi4NbO8Cl nanosheets and g-C3N4, respectively. This work may provide some insights into fabrication of efficient visible-light driven photocatalysts for environmental and energy applications.

入藏号: WOS:000504778400080

PubMed ID: 31557713

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Environmental; Environmental Sciences

ISSN: 0304-3894

eISSN: 1873-3336

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 41 条，共 381 条

标题: A preliminary study of extreme enrichment of critical elements in the Jiaodong gold deposits, China

作者: Yang, LQ (Yang LiQiang); Li, RH (Li RuiHong); Gao, X (Gao Xue); Qiu, KF (Qiu KunFeng); Zhang, L (Zhang Liang)

来源出版物: ACTA PETROLOGICA SINICA 卷: 36 期: 5 页: 1285-1314 DOI: 10.18654/1000-0569/2020.05.01 出版年: 2020

Web of Science 核心合集中的 "被引频次": 7

被引频次合计: 7

摘要: Jiaodong is a unique world-known Late Mesozoic giant gold province hosted in the Precambrian metamorphic terrane. It contains proven gold reserves of more than 5, 000 tons, being the top three gold provinces in the world, and is regarded as a representative area to test the new metallogenic theory and genetic model of giant gold deposits. Although the long-term utilization and research in Jiaodong almost exclusively focused on gold and ignored its coexisted critical elements, several new findings of tellurosulphides and a series of independent minerals containing the critical elements Te, Re, W, Zr, Cr, La, Ce, Sb, Bi, and As were identified. Our studies on the occurrence of critical elements within several typical gold deposits in Jiaodong reveal that the critical elements tend to be fined minerals coexisted with other minerals to form complex mineral assemblages. The critical elements nanoparticles are also hosted on the crystalline surface of other minerals, in the micro-cracks, and as solid solution in the crystal structures. In this contribution, the distribution and enrichment of critical elements in 12 gold deposits in Sanshandao, Jiaojia, and Zhaoping gold belts were preliminarily studied. Compared with the average crustal abundances in North China Craton, critical elements Cr, Co, Cd, Rb, Nb, Ta, Hf, W, Sn, REEs (except Ho), Sb, Bi, and As have different degrees of enrichment. The enrichment of Sb and Au formed the epizonal medium-temperature vein-type gold-antimony deposit, suggesting that it has substantial antimony resources to be substituted. The Cd, Co, Nb, Rb, As, and Bi are enriched to be utilized in a comprehensive way, showing high resource potentials, especially that Cd is enriched to economic grade. The Cr, Se, Te, Re, W, and LREE were found to be extremely enriched in hosted minerals and may be comprehensively utilized. Ta, Hf, Sn, and HREE have lower degree of enrichment and are far lower than the comprehensive evaluation level. Their host minerals are too fined or have not yet been discovered. The occurrence and distribution as well as extreme enrichment mechanism of critical elements in the Jiaodong gold deposits, however, are not well documented and understood. The Jiaodong giant gold province, compared with many other ore districts, is characterized by its abundant accumulation on exploration and research, enormous ores, well-established infrastructure, and self-contained preparation equipment and mineral processing process, making Jiaodong a superexcellent mining district for documenting untraditional critical element metallogenic system. Metal isotope, in-situ analyses and thermodynamic modeling are furthermore expected for depicting physicochemical conditions of extreme enrichment mechanism of critical elements in the Jiaodong gold deposits. Such finding and understanding will aid to constructing untraditional critical element metallogenic system and providing scientific grounds for better utilization of critical elements in the Jiaodong and analogous gold deposits.

入藏号: WOS:000562485700001

出版商: SCIENCE PRESS

出版商地址: 16 DONGHUANGCHENGGEN NORTH ST, BEIJING 100717, PEOPLES R CHINA

Web of Science 类别: Geology

ISSN: 1000-0569

eISSN: 2095-8927

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 42 条，共 381 条

标题: Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: a quick online cross-sectional survey

作者: Zhong, BL (Zhong, Bao-Liang); Luo, W (Luo, Wei); Li, HM (Li, Hai-Mei); Zhang, QQ (Zhang, Qian-Qian); Liu, XG (Liu, Xiao-Ge); Li, WT (Li, Wen-Tian); Li, Y (Li, Yi)

来源出版物: INTERNATIONAL JOURNAL OF BIOLOGICAL SCIENCES 卷: 16 期: 10 页: 1745-1752 DOI: 10.7150/ijbs.45221 出版年: 2020

Web of Science 核心合集中的 "被引频次": 266

被引频次合计: 273

摘要: Unprecedented measures have been adopted to control the rapid spread of the ongoing COVID-19 epidemic in China. People's adherence to control measures is affected by their knowledge, attitudes, and practices (KAP) towards COVID-19. In this study, we investigated Chinese residents' KAP towards COVID-19 during the rapid rise period of the outbreak. An online sample of Chinese residents was successfully recruited via the authors' networks with residents and popular media in Hubei, China. A self-developed online KAP questionnaire was completed by the participants. The knowledge questionnaire consisted of 12 questions regarding the clinical characteristics and prevention of COVID-19. Assessments on residents' attitudes and practices towards COVID-19 included questions on confidence in winning the battle against COVID-19 and wearing masks when going out in recent days. Among the survey completers (n=6910), 65.7% were women, 63.5% held a bachelor degree or above, and 56.2% engaged in mental labor. The overall correct rate of the knowledge questionnaire was 90%. The majority of the respondents (97.1%) had confidence that China can win the battle against COVID-19. Nearly all of the participants (98.0%) wore masks when going out in recent days. In multiple logistic regression analyses, the COVID-19 knowledge score (OR: 0.75-0.90, P<0.001) was significantly associated with a lower likelihood of negative attitudes and preventive practices towards COVID-2019. Most Chinese residents of a relatively high socioeconomic status, in particular women, are knowledgeable about COVID-19, hold optimistic attitudes, and have appropriate practices towards COVID-19. Health education programs aimed at improving COVID-19 knowledge are helpful for Chinese residents to hold optimistic attitudes and maintain appropriate practices. Due to the limited sample representativeness, we must be cautious when generalizing these findings to populations of a low socioeconomic status.

入藏号: WOS:000522973800011

PubMed ID: 32226294

出版商: IVYSPRING INT PUBL

出版商地址: PO BOX 4546, LAKE HAVEN, NSW 2263, AUSTRALIA

Web of Science 类别: Biochemistry & Molecular Biology; Biology

ISSN: 1449-2288

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16

第 43 条，共 381 条

标题: A fractional-order hyper-chaotic economic system with transient chaos

作者: Yousefpour, A (Yousefpour, Amin); Jahanshahi, H (Jahanshahi, Hadi); Munoz-Pacheco, JM (Munoz-Pacheco, Jesus M.); Bekiros, S (Bekiros, Stelios); Wei, ZC (Wei, Zhouchao)

来源出版物: CHAOS SOLITONS & FRACTALS 卷: 130 文献号: 109400 DOI: 10.1016/j.chaos.2019.109400 出版年: JAN 2020

Web of Science 核心合集中的 "被引频次": 12

被引频次合计: 12

摘要: We introduce for the first time a fractional-order hyperchaotic economic system. In this system, chaos generation depends upon the value of fractional-order. For certain fractional orders, a sustained regime of chaos is obtained. Also, the transient chaos phenomenon is detected for lower fractional orders. The dynamical behavior of the system is numerically investigated using bifurcations diagrams, basins of attraction, and Lyapunov exponents. Next, an adaptive terminal sliding mode control (ATSMC) with neural network estimator for finite-time stabilization and synchronization of the fractional-order system has been proposed. The radial basis function (RBF) neural network is used to achieve the estimation of the unknown function of the system. Also, the effects of external disturbances are fully taken into account with neural network estimator. The weights of the RBF neural network are updated based on the appropriate adaptation law. Using the fractional version of the Lyapunov stability theorem, the finite-time convergence of the closed-loop system has been proven. Finally, the new control technique is used for control and synchronization of the fractional-order hyperchaotic economic system. Simulation results illustrate the effectiveness of the proposed control scheme for uncertain fractional-order systems in the presence of external disturbances. (C) 2019 Elsevier Ltd. All rights reserved.

入藏号: WOS:000514570600009

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Mathematics, Interdisciplinary Applications; Physics, Multidisciplinary; Physics, Mathematical

ISSN: 0960-0779

eISSN: 1873-2887

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 44 条，共 381 条

标题: An improved numerical manifold method with multiple layers of mathematical cover systems for the stability analysis of soil-rock-mixture slopes

作者: Yang, YT (Yang, Yongtao); Sun, GH (Sun, Guanhua); Zheng, H (Zheng, Hong); Yan, CZ (Yan, Chengzeng)

来源出版物: ENGINEERING GEOLOGY 卷: 264 文献号: 105373 DOI: 10.1016/j.enggeo.2019.105373 出版年: JAN 2020

Web of Science 核心合集中的 "被引频次": 11

被引频次合计: 11

摘要: In order to carry out stability analysis of soil-rock-mixture(SRM) slopes, an improved numerical manifold method (NMM) with multiple layers of mathematical cover systems is proposed. For SRM problems, the computational cost of the improved NMM is smaller than that of the traditional NMM. Besides, an improved shear strength reduction technique(ISSRT) which can eliminate spurious plastic deformation of the slopes is implemented. Based on the improved NMM with multiple layers of mathematical cover systems, the stability of three slopes, namely, a homogeneous slope and two SRM slopes with different contents of rock blocks is analyzed. The numerical results about the three slopes indicate that: 1) the proposed numerical model can obtain the FOS of a slope with high accuracy; 2) the bigger the content of rock blocks, the larger the FOS of the SRM slope will be; 3) due to the existence of rock blocks, the failure mode of a SRM slope is different from that of a homogeneous soil slope.

入藏号: WOS:000513985500010

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Geological; Geosciences, Multidisciplinary

ISSN: 0013-7952

eISSN: 1872-6917

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 45 条，共 381 条

标题: New method to calculate apparent phase velocity of open-ended pipe pile

作者: Wu, WB (Wu, Wenbing); Liu, H (Liu, Hao); Yang, XY (Yang, Xiaoyan); Jiang, GS (Jiang, Guosheng); El Naggar, MH (El Naggar, M. Hesham); Mei, GX (Mei, Guoxiong); Liang, RZ (Liang, Rongzhu)

来源出版物: CANADIAN GEOTECHNICAL JOURNAL 卷: 57 期: 1 页: 127-138 DOI: 10.1139/cgj-2018-0816 出版年: JAN 2020

Web of Science 核心合集中的 "被引频次": 26

被引频次合计: 26

摘要: The apparent phase velocity of open-ended pipe piles after installation is difficult to predict owing to the soil-plug effect. This paper derives an analytical solution to calculate the apparent phase velocity of a pipe pile segment with soil-plug filling inside (APVPSP) based on the additional mass model. The rationality and accuracy of the developed solution are confirmed through comparison with the solution derived using the soil-plug Winkler model and experimental results. A parameter combination of the additional mass model that can be applied to concrete pipe piles used most commonly is recommended. The attenuation mechanism of the soil plug on the APVPSP is clarified. The findings from this study demonstrate that the APVPSP decreases with the mass per unit length of the pile, but has nothing to do with the material longitudinal wave velocity of the pipe pile. The APVPSP decreases significantly as the impulse width increases; however, for pipe piles without soil-plug filling inside, the impulse width has negligible influence on the apparent phase velocity.

入藏号: WOS:000505670800010

出版商: CANADIAN SCIENCE PUBLISHING

出版商地址: 65 AURIGA DR, SUITE 203, OTTAWA, ON K2E 7W6, CANADA

Web of Science 类别: Engineering, Geological; Geosciences, Multidisciplinary

ISSN: 0008-3674

eISSN: 1208-6010

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 46 条，共 381 条

标题: Experimental and numerical simulation of multi-component combustion of typical charring material

作者: Ding, YM (Ding, Yanming); Fukumoto, K (Fukumoto, Kazui); Ezekoye, OA (Ezekoye, Ofodike A.); Lu, SX (Lu, Shouxiang); Wang, CJ (Wang, Changjian); Li, CH (Li, Changhai)

来源出版物: COMBUSTION AND FLAME 卷: 211 页: 417-429 DOI: 10.1016/j.combustflame.2019.10.016 出版年: JAN 2020

Web of Science 核心合集中的 "被引频次": 19

被引频次合计: 20

摘要: The direct combustion of typical charring material, with wood as the main representative, has received extensive attention due to its potential as sustainable source of heat and power generation, and the substantial fraction of fuel load in many building fires. In real fire situations, multi-component condensed phase reactants and gas products are involved in the pyrolysis process and the subsequent combustion process. Interestingly, the numerical simulation of these multi-component reactions is relatively not yet well studied. To address this shortcoming, we consider how the reactants can be dealt with using a three-component parallel reaction mechanism and moisture model embedded into the pyrolysis model, wherein the reaction kinetic parameters are optimized by Shuffled Complex Evolution algorithm. The evolved gas products, measured by the TG-FTIR experiment, can be coupled with the extended EDC multicomponent combustion model and soot model using FireFOAM. Most of the thermophysical parameters are measured directly by experiments as the input values of simulation. In this work, the predicted results of mass loss rate and heat release rate are compared with experimental data of cone calorimetry, and the good agreement between them validates the applicability of the current multi-component model. Moreover, the effects of three sub-models (three-component parallel reaction mechanism, multiple evolved gas products and the extended EDC multi-component combustion model) are further analyzed based upon the predicted results. (C) 2019 The Combustion Institute. Published by Elsevier Inc. All rights reserved.

入藏号: WOS:000503319100035

出版商: ELSEVIER SCIENCE INC

出版商地址: STE 800, 230 PARK AVE, NEW YORK, NY 10169 USA

Web of Science 类别: Thermodynamics; Energy & Fuels; Engineering, Multidisciplinary; Engineering, Chemical; Engineering, Mechanical

ISSN: 0010-2180

eISSN: 1556-2921

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 47 条，共 381 条

标题: SO-CNN based urban functional zone fine division with VHR remote sensing image

作者: Zhou, W (Zhou, Wen); Ming, DP (Ming, Dongping); Lv, XW (Lv, Xianwei); Zhou, KQ (Zhou, Keqi); Bao, HQ (Bao, Hanqing); Hong, ZL (Hong, Zhaoli)

来源出版物: REMOTE SENSING OF ENVIRONMENT 卷: 236 文献号: 111458 DOI: 10.1016/j.rse.2019.111458 出版年: JAN 2020

Web of Science 核心合集中的 "被引频次": 11

被引频次合计: 11

摘要: Functional zone reflects city's spatial structures, and as a carrier of social and economic activities, it is of critical significance to urban management, resource allocation and planning. However, most researches on functional zone division are based on a large spatial scale such as blocks or other scales larger than it. Aiming at a subtle fine functional result, the concept of Super Object (SO) was especially explained, also a Super Object - Convolutional Neural Network (SO-CNN) based urban functional zone fine division method with very high resolution (VHR) remote sensing image was proposed. The original image was firstly segmented into different SOs which correspond to the basic functional zone units in geography. A random point generation algorithm was used to generate the voting points for functional zone category identification, and then a trained CNN model was employed to assign functional attributes to those voting points. Then a statistical method was involved to count the frequency of the classified voting points of different functional attributes in each basic functional zone units. By voting process, the functional attribute with the highest frequency was assigned to the basic functional zone unit, which corrected the misclassification results of CNN to some extent. This paper also explored the scale effect of the SO on the final functional zone classification result from two aspects, spatial scale of SO and the sampling window size of CNN model. Because of the natural differences between functional zone division and land cover classification, region based overall accuracy assessment method was used to evaluate functional zone division result. Compared with other methods, SO-CNN method can generate higher accuracy and subtle result, based on which larger spatial scale results can be available by scaling-up, so SO-CNN method plays a great significant role on small scale functional space structure research.

入藏号: WOS:000502894400001

出版商: ELSEVIER SCIENCE INC

出版商地址: STE 800, 230 PARK AVE, NEW YORK, NY 10169 USA

Web of Science 类别: Environmental Sciences; Remote Sensing; Imaging Science & Photographic Technology

ISSN: 0034-4257

eISSN: 1879-0704

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 48 条，共 381 条

标题: Ancient deep roots for Mesozoic world-class gold deposits in the north China craton: An integrated genetic perspective

作者: Yang, CX (Yang, Cheng-Xue); Santosh, M (Santosh, M.)

来源出版物: GEOSCIENCE FRONTIERS 卷: 11 期: 1 页: 203-214 DOI: 10.1016/j.gsf.2019.03.002 出版年: JAN 2020

Web of Science 核心合集中的 "被引频次": 43

被引频次合计: 43

摘要: The North China Craton (NCC) hosts some of the world-class gold deposits that formed more than 2 billion years after the major orogenic cycles and cratonization. The diverse models for the genesis of these deposits remain equivocal, and mostly focused on the craton margin examples, although synchronous deposits formed in the interior domains. Here we adopt an integrated geological and geophysical perspective to evaluate the possible factors that contributed to the formation of the major gold deposits in the NCC. In the Archean tectonic framework of the NCC, the locations of the major gold deposits fall within or adjacent to greenstone belts or the margins of micro-continents. In the Paleoproterozoic framework, they are markedly aligned along two major collisional sutures - the Trans North China Orogen and the Jiao-Liao-Ji Belt. Since the Mesozoic intrusions hosting these deposits do not carry adequate signals for the source of gold, we explore the deep roots based on available geophysical data. We show that the gold deposits are preferentially distributed above zones of uplifted MOHO and shallow LAB corresponding to thinned crust and eroded sub-lithospheric mantle, and that the mineralization is located above regions of high heat flow representing mantle upwelling. The NCC was at the center of a multi-convergent regime during the Mesozoic which intensely churned the mantle and significantly enriched it. The geophysical data on Moho and LAB upwarp from the centre towards east of the craton is more consistent with paleo-Pacific slab subduction from the east exerting the dominant control on lithospheric thinning. Based on these results, and together with an evaluation of the geochemical and isotopic features of the Mesozoic magmatic intrusions hosting the gold mineralization, we propose a genetic model that invokes reworking of ancient Au archives preserved in the lower crust and metasomatised upper mantle and which were generated through multiple subduction, underplating and cumulation events associated with cratonization of the NCC as well as the subduction-collision of Yangtze Craton with the NCC. The heat and material input along zones of heterogeneously thinned lithosphere from a rising turbulent mantle triggered by Mesozoic convergent margins surrounding the craton aided in reworking the deep roots of the ancient Au reservoirs, leading to the major gold metallogeny along craton margins as well as in the interior of the NCC. (C) 2019, China University of Geosciences (Beijing) and Peking University. Production and hosting by Elsevier B.V.

入藏号: WOS:000503182200012

出版商: CHINA UNIV GEOSCIENCES, BEIJING

出版商地址: 29 XUEYUAN RD, HAIDIAN DISTRICT, 100083, PEOPLES R CHINA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1674-9871

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 49 条，共 381 条

标题: Sulfur-based mixotrophic bio-reduction for efficient removal of chromium (VI) in groundwater

作者: Zhang, BG (Zhang, Baogang); Wang, ZL (Wang, Zhongli); Shi, JX (Shi, Jiaxin); Dong, HL (Dong, Hailiang)

来源出版物: GEOCHIMICA ET COSMOCHIMICA ACTA 卷: 268 页: 296-309 DOI: 10.1016/j.gca.2019.10.011 出版年: JAN 1 2020

Web of Science 核心合集中的 "被引频次": 36

被引频次合计: 36

摘要: Organic matter and reduced sulfur compounds commonly coexist in groundwater aquifers and their respective roles in Cr (VI) bio-reduction have been well established, but Cr(VI) bio-reduction under mixotrophic condition, where organics and elemental sulfur simultaneously occur as co-donors of electrons, remains largely unknown. Herein a sulfur-based mixotrophic bio-reduction process is demonstrated to be effective to detoxify Cr(VI), with a removal efficiency of 95.5 +/- 0.74% within 48 h at an initial concentration of 50 mg/L. In addition to direct reduction by heterotrophic Cr(VI) reducers such as Desulfovibrio and Desulfuromonas, volatile fatty acids (VFAs) produced from autotrophic sulfur oxidation served as electron donors for heterotrophic Cr(VI) reducers. Part of VFAs was also assimilated and accumulated as glycogen within cells, which enhanced their Cr(VI) removal capacity. Metabolic pathway analysis suggested that Cr(VI) was reduced to insoluble Cr(III) both extracellularly by cytochrome c and intracellularly by nicotinamide adenine dinucleotide in the presence of upregulated chrA gene. Constituents of extracellular polymeric substances (EPS) also contributed to Cr(VI) reduction enzymatically, through binding of toxic Cr(VI) by carboxyl and hydroxyl groups. Results from this study have important implications for understanding the biogeochemical behavior and environmental remediation of Cr(VI) in groundwater aquifers and sediments/soils. (C) 2019 Elsevier Ltd. All rights reserved.

入藏号: WOS:000500923500016

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0016-7037

eISSN: 1872-9533

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 50 条，共 381 条

标题: Infrared and visible image fusion based on target-enhanced multiscale transform decomposition

作者: Chen, J (Chen, Jun); Li, XJ (Li, Xuejiao); Luo, LB (Luo, Linbo); Mei, XG (Mei, Xiaoguang); Ma, JY (Ma, Jiayi)

来源出版物: INFORMATION SCIENCES 卷: 508 页: 64-78 DOI: 10.1016/j.ins.2019.08.066 出版年: JAN 2020

Web of Science 核心合集中的 "被引频次": 23

被引频次合计: 23

摘要: In this study, we propose a target-enhanced multiscale transform (MST) decomposition model for infrared and visible image fusion to simultaneously enhance the thermal target in infrared images and preserve the texture details in visible images. The Laplacian pyramid is initially used to separately decompose two pre-registered source images into low- and high-frequency bands. The common "max-absolute" fusion rule is performed for fusion for high-frequency bands. We use the decomposed infrared low-frequency information to determine the fusion weight of low-frequency bands and highlight the target. Meanwhile, a regularization parameter is introduced to dominate the proportion of the infrared features in a gentle manner, which can be further adjusted according to user requirements. Finally, we use inverse transform with the Laplacian pyramid (LP) to reconstruct the fused image. Qualitative and quantitative experimental results on publicly available datasets demonstrate that the proposed method can generate fused images with clearly highlighted targets and abundant details. These images exhibit better visual effects and objective metric values than those of five other commonly used MST decomposition methods. (C) 2019 Elsevier Inc. All rights reserved.

入藏号: WOS:000489000600005

出版商: ELSEVIER SCIENCE INC

出版商地址: STE 800, 230 PARK AVE, NEW YORK, NY 10169 USA

Web of Science 类别: Computer Science, Information Systems

ISSN: 0020-0255

eISSN: 1872-6291

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 51 条，共 381 条

标题: Facile preparation of porous Mn/Fe3O4 cubes as peroxymonosulfate activating catalyst for effective bisphenol A degradation

作者: Du, JK (Du, Jiangkun); Bao, JG (Bao, Jianguo); Liu, Y (Liu, Ying); Kim, SH (Kim, Sang Hoon); Dionysiou, DD (Dionysiou, Dionysios D.)

来源出版物: CHEMICAL ENGINEERING JOURNAL 卷: 376 特刊: SI 文献号: 119193 DOI: 10.1016/j.cej.2018.05.177 出版年: NOV 15 2019

Web of Science 核心合集中的 "被引频次": 51

被引频次合计: 51

摘要: Metal oxides are potentially interesting catalysts for activating peroxymonosulfate (PMS) for the degradation of recalcitrant contaminants. This study presents a magnetic porous Mn-Fe binary oxide (p-Mn/Fe3O4) in micronsize with abundant micro- and meso- pores. This novel catalyst exhibited high efficacy and long-term stability in activating PMS for degradation of bisphenol A (BPA). Sulfate radicals and hydroxyl radicals were identified from catalytic PMS activation according to electron paramagnetic resonance (EPR) characterization. The effects of Fe/Mn ratio, catalyst dose, initial pH and temperature were investigated. Compared to monometallic oxides, p-Mn/Fe3O4 exhibited a better catalytic performance because of the significant synergy between Mn and Fe species. Several BPA intermediates were identified. On the basis of bio-toxicity assay and TOC measurements, BPA transformed to some toxic intermediates during the initial reaction stage, and then decomposed efficiently to low toxicity products and mineralized to carbon dioxide and water molecules. This study shows that p-Mn/Fe3O4 is an efficient and environmentally benign catalyst for PMS oxidation of organic pollutants.

入藏号: WOS:000489022900013

出版商: ELSEVIER SCIENCE SA

出版商地址: PO BOX 564, 1001 LAUSANNE, SWITZERLAND

Web of Science 类别: Engineering, Environmental; Engineering, Chemical

ISSN: 1385-8947

eISSN: 1873-3212

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 52 条，共 381 条

标题: Coseismic Rupture Process of the Large 2019 Ridgecrest Earthquakes From Joint Inversion of Geodetic and Seismological Observations

作者: Liu, CL (Liu, Chengli); Lay, T (Lay, Thorne); Brodsky, EE (Brodsky, Emily E.); Dascher-Cousineau, K (Dascher-Cousineau, Kelian); Xiong, X (Xiong, Xiong)

来源出版物: GEOPHYSICAL RESEARCH LETTERS 卷: 46 期: 21 页: 11820-11829 DOI: 10.1029/2019GL084949 提前访问日期: NOV 2019 出版年: NOV 16 2019

Web of Science 核心合集中的 "被引频次": 36

被引频次合计: 36

摘要: On 4 and 6 July 2019, two large strike-slip earthquakes with W-phase moment magnitudes M-WW 6.5 (foreshock) and M-WW 7.1 (mainshock) struck the Eastern California Shear Zone, northeast of Ridgecrest. The faulting geometry and kinematic coseismic slip distribution of both events are determined by jointly inverting seismological and geodetic observations guided by aftershock and surface rupture locations. The foreshock ruptured two orthogonal faults with a prominent L-shaped geometry with maximum slip of similar to 1.1 m on the NE-SW segment. The mainshock faulting extended NW-SE along several primary fault segments that straddle the foreshock slip. The surface rupture and slip model indicate mostly near-horizontal strike-slip motion with maximum slip of similar to 3.7 m, but there is a localized vertical dip-slip motion. Both the foreshock and mainshock ruptures terminate in regions of complex surface offsets. High aftershock productivity and low rupture velocity may be the result of rupture of a relatively immature fault system.

Plain Language Summary Two large earthquakes on 4 July 2019 (magnitude 6.5) and 6 July 2019 (magnitude 7.1) struck northeast of Ridgecrest, California. Earthquakes such as the 1995 Ridgecrest earthquake have occurred previously in this broad region, called the Eastern California Shear Zone, but the deformation is not concentrated into a dominant single fault. The first rupture involved slip on two perpendicular faults, one aligned NE-SW and the other NW-SE, with slip and aftershocks forming an Lshaped pattern. Most slip was on the NE-SW fault. The mainshock ruptured a sequence of NW-SE trending faults, with slip extending across the short NW-SE segment ruptured in the foreshock. Both ruptures were delimited by zones of multiple surface fractures. The rupture for the mainshock expanded relatively slowly with low radiated energy, and a large number of aftershocks occurred, suggesting rupture of an immature segmented fault system.

入藏号: WOS:000494927500001

出版商: AMER GEOPHYSICAL UNION

出版商地址: 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0094-8276

eISSN: 1944-8007

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16

第 53 条，共 381 条

标题: Geohazards in the three Gorges Reservoir Area, China Lessons learned from decades of research

作者: Tang, HM (Tang, Huiming); Wasowski, J (Wasowski, Janusz); Juang, CH (Juang, C. Hsein)

来源出版物: ENGINEERING GEOLOGY 卷: 261 文献号: 105267 DOI: 10.1016/j.enggeo.2019.105267 出版年: NOV 1 2019

Web of Science 核心合集中的 "被引频次": 66

被引频次合计: 66

摘要: The impoundment of the 660-km long reservoir behind the huge Three Gorges Dam, the world's largest hydropower station, increased regional seismicity and reactivated severe geohazards. Before the reservoir filling was initiated in 2003, the region had approximately two earthquakes per year with magnitudes between 3.0 and 4.9; after the full impoundment in 2008, approximately 14 earthquakes per year occurred with magnitudes between 3.0 and 5.4. In addition, hundreds of landslides were reactivated and are now in a state of intermittent creep. Many landslides exhibit step-like annual pattern of displacement in response to quasi-regular variations in seasonal rainfall and reservoir level. Additional problems include rock avalanches, impulse waves and debris flows. The seriousness of these events motivated numerous studies that resulted in 1) Better insight into the behavior and evolution mechanism of geohazards in the Three Gorges Reservoir Area (TGRA); 2) Implementation of monitoring and early-warning systems of geohazards; and 3) Design and construction of preventive countermeasures including lattice anchors, stabilizing piles, rock bolts, drainage canals and tunnels, and huge revetments. This paper reviews the hydro-geologic setting of TGRA geohazards, examines their occurrence and evolution in the past few decades, offers insight learned from extensive research on TGRA geohazards, and suggests topics for future research to address the remaining challenges.

入藏号: WOS:000496039100001

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Geological; Geosciences, Multidisciplinary

ISSN: 0013-7952

eISSN: 1872-6917

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 54 条，共 381 条

标题: Remobilization of metasomatized mantle lithosphere: a new model for the Jiaodong gold province, eastern China

作者: Deng, J (Deng, Jun); Wang, QF (Wang, Qingfei); Santosh, M (Santosh, M.); Liu, XF (Liu, Xuefei); Liang, YY (Liang, Yayun); Yang, LQ (Yang, Liqiang); Zhao, R (Zhao, Rui); Yang, L (Yang, Lin)

来源出版物: MINERALIUM DEPOSITA 卷: 55 期: 2 特刊: SI 页: 257-274 DOI: 10.1007/s00126-019-00925-0 提前访问日期: OCT 2019 出版年: FEB 2020

Web of Science 核心合集中的 "被引频次": 29

被引频次合计: 29

摘要: The 1 20 Ma Jiaodong province in the North China Craton, composed of abundant Mesozoic granites that intrude Precambrian metamorphic basement, is bordered by the Sulu orogenic belt, which formed through the collision between the North China and Yangtze cratons in the Triassic. Insights on the geodynamic setting and source of gold and fluids in the Jiaodong gold province are based on a detailed study of the Sanshandao deposit. The delta C-13(PDB) and delta O-18 values of hydrothermal calcite from this deposit range from - 4.3 to - 6.5 parts per thousand and 11.4 to 15.1 parts per thousand, respectively, which are compatible with a mantle source. Pre-ore mafic dykes in the deposit show typical arc-like geochemical features, suggesting that the mantle source was metasomatized prior to the basic magmatism. The delta S-34 values of gold-related pyrite from Sanshandao and other large deposits in the province range from 10.9 to 11.5 parts per thousand and are higher than those of the country rocks, but consistent with the signature of orogenic gold deposits sourced from a Neoproterozoic sedimentary reservoir. These high positive delta S-34 values are interpreted to be inherited from auriferous Neoproterozoic sedimentary rocks of the northern Yangtze Craton, which were subducted into the mantle lithosphere beneath the North China Craton during the formation of eclogite in the adjacent Sulu orogenic belt in the Triassic. The syn-ore Lower Cretaceous mafic dykes display oceanic island basalt-like geochemical features, suggesting that asthenosphere upwelling triggered the release of gold and sulfur from an enriched and fertilized mantle lithosphere, contributing to the auriferous fluid which formed the widespread gold mineralization in the Jiaodong province at ca. 120 Ma.

入藏号: WOS:000492658100001

出版商: SPRINGER

出版商地址: ONE NEW YORK PLAZA, SUITE 4600, NEW YORK, NY, UNITED STATES

Web of Science 类别: Geochemistry & Geophysics; Mineralogy

ISSN: 0026-4598

eISSN: 1432-1866

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 55 条，共 381 条

标题: Discrete Zr and REE mineralization of the Baerzhe rare-metal deposit, China

作者: Qiu, KF (Qiu, Kunfeng); Yu, HC (Yu, Haocheng); Wu, MQ (Wu, Mingqian); Geng, JZ (Geng, Jianzhen); Ge, XK (Ge, Xiangkun); Gou, ZY (Gou, Zongyang); Taylor, RD (Taylor, Ryan D.)

来源出版物: AMERICAN MINERALOGIST 卷: 104 期: 10 页: 1487-1502 DOI: 10.2138/am-2019-6890 出版年: OCT 2019

Web of Science 核心合集中的 "被引频次": 36

被引频次合计: 37

摘要: Although REE (lanthanides + Sc + Y) mineralization in alkaline silicate systems is commonly accompanied with Zr mineralization worldwide, our understanding of the relationship between Zr and REE mineralization is still incomplete. The Baerzhe deposit in Northeastern China is a reservoir of REE, Nb, Zr, and Be linked to the formation of an Early Cretaceous, silica-saturated, alkaline intrusive complex. In this study, we use in situ laser ablation-inductively coupled plasma-mass spectrometry (LA-ICP-MS) analyses of zircon and monazite crystals to constrain the relationship between Zr and REE mineralization at Baerzhe.

Three groups of zircon are identified and are differentiated based upon textural observations and compositional characteristics. Type Ia zircons display well-developed oscillatory zoning. Type Ib zircons are darker in cathodoluminescence images and have more irregular zoning and resorption features than type Ia zircons. In addition, type Ib zircons can locally occur as overgrowths on type Ia zircons. Type II zircons contain irregular but translucent cores and rims with oscillatory zoning that are murky brown in color and occur in aggregates. Textural features and compositional data suggest that types Ia and Ib zircon crystallized at the magmatic stage, with type Ia being least-altered and type Ib being strongly altered. Type II zircons, on the other hand, precipitated during the magmatic to magmatic-hydrothermal transition. Whereas the magnitude of the Eu anomaly is moderate in the barren alkaline granite, both magmatic and deuteric zircon exhibit pronounced negative anomalies. Such features are difficult to explain exclusively by feldspar fractionation and could indicate the presence of fluid induced modification of the rocks. Monazite crystals occur mostly through replacement of zircon and sodic amphibole; monazite clusters are also present. Textural and compositional evidence suggests that monazite at Baerzhe is hydrothermal.

Types Ia and Ib magmatic zircon yield Pb-207-corrected (PbU)-Pb-206-U-/238 ages of 127.2 +/- 1.3 and 125.4 +/- 0.7 Ma, respectively. Type II deuteric zircon precipitated at 124.9 +/- 0.6 Ma. The chronological data suggest that the magmatic stage of the highly evolved Baerzhe alkaline granite lasted less than two million years. Hydrothermal monazite records a REE mineralization event at 122.8 +/- 0.6 Ma, approximately 1 or 2 million years after Zr mineralization. We therefore propose a model in which parental magmas of the Baerzhe pluton underwent extensive magmatic differentiation while residual melts interacted with aqueous hydrothermal fluids. Deuteric zircon precipitated from a hydrosilicate liquid, and subsequent REE mineralization, exemplified by hydrothermal monazite, correlates with hydrothermal metasomatic alteration that postdated the hydrosilicate liquid event. Such interplay between magmatic and hydrothermal processes resulted in the formation of discrete Zr and REE mineralization at Baerzhe.

入藏号: WOS:000489266400013

出版商: MINERALOGICAL SOC AMER

出版商地址: 3635 CONCORDE PKWY STE 500, CHANTILLY, VA 20151-1125 USA

Web of Science 类别: Geochemistry & Geophysics; Mineralogy

ISSN: 0003-004X

eISSN: 1945-3027

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 56 条，共 381 条

标题: Flood susceptibility mapping in Dingnan County (China) using adaptive neuro-fuzzy inference system with biogeography based optimization and imperialistic competitive algorithm

作者: Wang, Y (Wang, Yi); Hong, HY (Hong, Haoyuan); Chen, W (Chen, Wei); Li, SJ (Li, Shaojun); Panahi, M (Panahi, Mahdi); Khosravi, K (Khosravi, Khabat); Shirzadi, A (Shirzadi, Ataollah); Shahabi, H (Shahabi, Himan); Panahi, S (Panahi, Somayeh); Costache, R (Costache, Romulus)

来源出版物: JOURNAL OF ENVIRONMENTAL MANAGEMENT 卷: 247 页: 712-729 DOI: 10.1016/j.jenvman.2019.06.102 出版年: OCT 1 2019

Web of Science 核心合集中的 "被引频次": 49

被引频次合计: 49

摘要: Flooding is one of the most significant environmental challenges and can easily cause fatal incidents and economic losses. Flood reduction is costly and time-consuming task; so it is necessary to accurately detect flood susceptible areas. This work presents an effective flood susceptibility mapping framework by involving an adaptive neuro-fuzzy inference system (ANFIS) with two metaheuristic methods of biogeography based optimization (BBO) and imperialistic competitive algorithm (ICA). A total of 13 flood influencing factors, including slope, altitude, aspect, curvature, topographic wetness index, stream power index, sediment transport index, distance to river, landuse, normalized difference vegetation index, lithology, rainfall and soil type, were used in the proposed framework for spatial modeling and Dingnan County in China was selected for the application of the proposed methods due to data availability. There are 115 flood occurrences in the study area which were randomly separated into training (70% of the total) and verification (30%) sets. To perform the proposed framework, the step-wise weight assessment ratio analysis algorithm is first used to evaluate the correlation between influencing factors and floods. Then, two ensemble methods of ANFIS-BBO and ANFIS-ICA are constructed for spatial prediction and producing flood susceptibility maps. Finally, these resultant maps are assessed in terms of several statistical and error measures, including receiver operating characteristic (ROC) curve and area under the ROC curve (AUC), root-mean-square error (RMSE). The experimental results demonstrated that the two ensemble methods were more effective than ANFIS in the study area. For instance, the predictive AUC values of 0.8407, 0.9045 and 0.9044 were achieved by the methods of ANFIS, ANFIS-BBO and ANFIS-ICA, respectively. Moreover, the RMSE values for ANFIS, ANFIS-BBO and ANFIS-ICA using the verification set were 0.3100, 0.2730 and 0.2700, respectively. In addition, as regards ANFIS-BBO and ANFIS-ICA, a total areas of 39.30% and 35.39% were classified as highly susceptible to flooding. Therefore, the proposed ensemble framework can be used for flood susceptibility mapping in other sites with similar geo-environmental characteristics for taking measures to manage and prevent flood damages.

入藏号: WOS:000483635000072

PubMed ID: 31279803

出版商: ACADEMIC PRESS LTD- ELSEVIER SCIENCE LTD

出版商地址: 24-28 OVAL RD, LONDON NW1 7DX, ENGLAND

Web of Science 类别: Environmental Sciences

ISSN: 0301-4797

eISSN: 1095-8630

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 57 条，共 381 条

标题: Spatial Prediction of Landslide Susceptibility Using GIS-Based Data Mining Techniques of ANFIS with Whale Optimization Algorithm (WOA) and Grey Wolf Optimizer (GWO)

作者: Chen, W (Chen, Wei); Hong, HY (Hong, Haoyuan); Panahi, M (Panahi, Mandi); Shahabi, H (Shahabi, Himan); Wang, Y (Wang, Yi); Shirzadi, A (Shirzadi, Ataollah); Pirasteh, S (Pirasteh, Saied); Alesheikh, AA (Alesheikh, Ali Asghar); Khosravi, K (Khosravi, Khabat); Panahi, S (Panahi, Somayeh); Rezaie, F (Rezaie, Fatemeh); Li, SJ (Li, Shaojun); Jaafari, A (Jaafari, Abolfazl); Bui, DT (Dieu Tien Bui); Bin Ahmad, B (Bin Ahmad, Baharin)

来源出版物: APPLIED SCIENCES-BASEL 卷: 9 期: 18 文献号: 3755 DOI: 10.3390/app9183755 出版年: SEP 2019

Web of Science 核心合集中的 "被引频次": 45

被引频次合计: 45

摘要: The most dangerous landslide disasters always cause serious economic losses and human deaths. The contribution of this work is to present an integrated landslide modelling framework, in which an adaptive neuro-fuzzy inference system (ANFIS) is combined with the two optimization algorithms of whale optimization algorithm (WOA) and grey wolf optimizer (GWO) at Anyuan County, China. It means that WOA and GWO are used as two meta-heuristic algorithms to improve the prediction performance of the ANFIS-based methods. In addition, the step-wise weight assessment ratio analysis (SWARA) method is used to obtain the initial weight of each class of landslide influencing factors. To validate the effectiveness of the proposed framework, 315 landslide events in history were selected for our experiments and were randomly divided into the training and verification sets. To perform landslide susceptibility mapping, fifteen geological, hydrological, geomorphological, land cover, and other factors are considered for the modelling construction. The landslide susceptibility maps by SWARA, SWARA-ANFIS, SWARA-ANFIS-PSO, SWARA-ANFIS-WOA, and SWARA-ANFIS-GWO models are assessed using the measures of the receiver operating characteristic (ROC) curve and root-mean-square error (RMSE). The experiments demonstrated that the obtained results of modelling process from the SWARA to the SAWRA-ANFIS-GWO model were more accurate and that the proposed methods have satisfactory prediction ability. Specifically, prediction accuracy by area under the curve (AUC) of SWARA, SWARA-ANFIS, SWARA-ANFIS-PSO, SWARA-ANFIS-GWO, and SWARA-ANFIS-WOA models were 0.831, 0.831, 0.850, 0.856, and 0.869, respectively. Due to adaptability and usability, the proposed prediction methods can be applied to other areas for landslide management and mitigation as well as prevention throughout the world.

入藏号: WOS:000489115200115

出版商: MDPI

出版商地址: ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND

Web of Science 类别: Chemistry, Multidisciplinary; Engineering, Multidisciplinary; Materials Science, Multidisciplinary; Physics, Applied

eISSN: 2076-3417

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 58 条，共 381 条

标题: A Hybrid Deep Learning-Based Model for Anomaly Detection in Cloud Datacenter Networks

作者: Garg, S (Garg, Sahil); Kaur, K (Kaur, Kuljeet); Kumar, N (Kumar, Neeraj); Kaddoum, G (Kaddoum, Georges); Zomaya, AY (Zomaya, Albert Y.); Ranjan, R (Ranjan, Rajiv)

来源出版物: IEEE TRANSACTIONS ON NETWORK AND SERVICE MANAGEMENT 卷: 16 期: 3 页: 924-935 DOI: 10.1109/TNSM.2019.2927886 出版年: SEP 2019

Web of Science 核心合集中的 "被引频次": 40

被引频次合计: 40

摘要: With the emergence of the Internet-of-Things (IoT) and seamless Internet connectivity, the need to process streaming data on real-time basis has become essential. However, the existing data stream management systems are not efficient in analyzing the network log big data for real-time anomaly detection. Further, the existing anomaly detection approaches are not proficient because they cannot be applied to networks, are computationally complex, and suffer from high false positives. Thus, in this paper a hybrid data processing model for network anomaly detection is proposed that leverages grey wolf optimization (GWO) and convolutional neural network (CNN). To enhance the capabilities of the proposed model, GWO and CNN learning approaches were enhanced with: 1) improved exploration, exploitation, and initial population generation abilities and 2) revamped dropout functionality, respectively. These extended variants are referred to as Improved-GWO (ImGWO) and Improved-CNN (ImCNN). The proposed model works in two phases for efficient network anomaly detection. In the first phase, ImGWO is used for feature selection in order to obtain an optimal trade-off between two objectives, i.e., reduced error rate and feature-set minimization. In the second phase, ImCNN is used for network anomaly classification. The efficacy of the proposed model is validated on benchmark (DARPA'98 and KDD'99) and synthetic datasets. The results obtained demonstrate that the proposed cloud-based anomaly detection model is superior in comparison to the other state-of-the-art models (used for network anomaly detection), in terms of accuracy, detection rate, false positive rate, and F-score. In average, the proposed model exhibits an overall improvement of 8.25%, 4.08%, and 3.62% in terms of detection rate, false positives, and accuracy, respectively; relative to standard GWO with CNN.

入藏号: WOS:000485689000011

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Computer Science, Information Systems

ISSN: 1932-4537

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16

第 59 条，共 381 条

标题: Municipal solid waste (MSW) incineration fly ash as an important source of heavy metal pollution in China

作者: Wang, P (Wang, Ping); Hu, YA (Hu, Yuanan); Cheng, HF (Cheng, Hefa)

来源出版物: ENVIRONMENTAL POLLUTION 卷: 252 页: 461-475 DOI: 10.1016/j.envpol.2019.04.082 子辑: A 出版年: SEP 2019

Web of Science 核心合集中的 "被引频次": 30

被引频次合计: 32

摘要: Incineration has overtaken landfilling as the most important option for disposal of the increasing volumes of municipal solid waste (MSW) generated in China. Accordingly, disposal of the incineration fly ash, which is enriched with a range of heavy metals, has become a key challenge for the industry. This review analyzes the temporal and spatial trends in the distributions of As, Cd, Cr, Cu, Ni, Pb, Zn, and Hg in MSW incineration fly ash between 2003 and 2017, and estimates the inventories of heavy metals associated with the fly ash and the average levels of heavy metals in Chinese MSW based on their mass flow during MSW incineration. It was estimated that MSW incinerators in China released approximately 1.12 x 10(2), 2.96 x 10(3), 1.82 x 10(2), 3.64 x 10(4), 1.00 x 10(2), 7.32 x 10(3), 2.42 x 10(2), and 1.47 x 10(1) tonnes of Cd, Pb, Cr, Zn, Ni, Cu, As, and Hg, respectively, with the fly ash in 2016. Due to the much greater fly ash generation rate, the incinerators based on circulating fluidized bed combustor (CFBC) technology released more heavy metals during incineration of MSW compared to those based on grate furnace combustor (GFC) technology. Results of mass-flow modeling indicate that the geometric mean contents of Cd, Pb, Cr, Zn, Ni, Cu, As, and Hg in Chinese MSW were 3.0, 109, 101, 877, 34, 241, 21, and 1.7 mg/kg, respectively, which are comparable to those in the MSW from other countries. To protect the environment from the significant potential ecological risk posed by heavy metals in the mismanaged fly ash, strict regulation enforcement and compliance monitoring are necessary to reduce the heavy metal pollution brought by improper disposal of MSW incineration fly ash, and more research and development efforts on advanced technologies for stabilization of heavy metals in fly ash and its environmentally sound reuse can help mitigate its environmental risk. (C) 2019 Elsevier Ltd. All rights reserved.

入藏号: WOS:000483005500049

PubMed ID: 31158674

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Environmental Sciences

ISSN: 0269-7491

eISSN: 1873-6424

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 60 条，共 381 条

标题: Reactant activation and photocatalysis mechanisms on Bi-metal@Bi2GeO5 with oxygen vacancies: A combined experimental and theoretical investigation

作者: Li, XW (Li, Xinwei); Zhang, WD (Zhang, Wendong); Cui, W (Cui, Wen); Li, JY (Li, Jieyuan); Sun, YJ (Sun, Yanjuan); Jiang, GM (Jiang, Guangming); Huang, HW (Huang, Hongwei); Zhang, YX (Zhang, Yuxin); Dong, F (Dong, Fan)

来源出版物: CHEMICAL ENGINEERING JOURNAL 卷: 370 页: 1366-1375 DOI: 10.1016/j.cej.2019.04.003 出版年: AUG 15 2019

Web of Science 核心合集中的 "被引频次": 62

被引频次合计: 62

摘要: The photocatalysis process follows two fundamental sequences: reactant adsorption and surface photocatalysis. In this work, Bi metal-deposited Bi2GeO5 (Bi@BiGeO) is prepared as a model photocatalyst to understand the adsorption and activation mechanisms of the reactants and the photocatalytic oxidation of NO under visible light irradiation. Density functional theory and analytical approaches are employed to reveal the electronic structure and photo-induced carrier transfer processes. The introduction of Bi metal and the generation of oxygen vacancies (OVs) in BiGeO were achieved simultaneously via a facile method. The Bi metal served as a visible light antenna and as an electron sink and promoted the carrier separation and transfer. The OVs promote reactant (H2O and O-2) activation, thereby reinforcing the generation of reactive oxygen species (ROS). The NO molecules are actively adsorbed at the coordinative unsaturated sites on Bi@BiGeO and get activated via electron exchange. The photocatalytic NO oxidation mechanism on Bi@BiGeO is revealed based on the reaction intermediates and final products monitored using in-situ FTIR. This work highlights the importance of reactant activation as a new strategy for the design of highly efficient photocatalysts to overcome the bottlenecks in environmental applications.

入藏号: WOS:000467387200117

出版商: ELSEVIER SCIENCE SA

出版商地址: PO BOX 564, 1001 LAUSANNE, SWITZERLAND

Web of Science 类别: Engineering, Environmental; Engineering, Chemical

ISSN: 1385-8947

eISSN: 1873-3212

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 61 条，共 381 条

标题: Flood susceptibility modelling using novel hybrid approach of reduced-error pruning trees with bagging and random subspace ensembles

作者: Chen, W (Chen, Wei); Hong, HY (Hong, Haoyuan); Li, SJ (Li, Shaojun); Shahabi, H (Shahabi, Himan); Wang, Y (Wang, Yi); Wang, XJ (Wang, Xiaojing); Bin Ahmad, B (Bin Ahmad, Baharin)

来源出版物: JOURNAL OF HYDROLOGY 卷: 575 页: 864-873 DOI: 10.1016/j.jhydrol.2019.05.089 出版年: AUG 2019

Web of Science 核心合集中的 "被引频次": 60

被引频次合计: 60

摘要: Flooding is a very common natural hazard that causes catastrophic effects worldwide. Recently, ensemble-based techniques have become popular in flood susceptibility modelling due to their greater strength and efficiency in the prediction of flood locations. Thus, the aim of this study was to employ machine learning-based Reduced-error pruning trees (REPTree) with Bagging (Bag-REPTree) and Random subspace (RS-REPTree) ensemble frameworks for spatial prediction of flood susceptibility using a geographic information system (GIS). First, a flood spatial database was constructed with 363 flood locations and thirteen flood influencing factors, namely altitude, slope angle, slope aspect, curvature, stream power index (SPI), sediment transport index (STI), topographic wetness index (TWI), distance to rivers, normalized difference vegetation index (NDVI), soil, land use, lithology, and rainfall. Subsequently, correlation attribute evaluation (CAE) was used as the factor selection method for optimization of input factors. Finally, the receiver operating characteristic (ROC) curve, standard error (SE), confidence interval (CI) at 95%, and Wilcoxon signed-rank test were used to validate and compare the performance of the models. Results show that the RS-REPTree model has the highest prediction capability for flood susceptibility assessment, with the highest area under (the ROC) curve (AUC) value (0.949, 0.907), the smallest SE (0.011, 0.023), and the narrowest CI (95%) (0.928-0.970, 0.863-0.952) for the training and validation datasets. It was followed by the Bag-REPTree and REPTree models, respectively. The results also proved the superiority of the ensemble method over using these methods individually.

入藏号: WOS:000488143000066

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Civil; Geosciences, Multidisciplinary; Water Resources

ISSN: 0022-1694

eISSN: 1879-2707

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 62 条，共 381 条

标题: Current status, challenges, and policy suggestions for coalbed methane industry development in China: A review

作者: Tao, S (Tao, Shu); Chen, SD (Chen, Shida); Pan, ZJ (Pan, Zhejun)

来源出版物: ENERGY SCIENCE & ENGINEERING 卷: 7 期: 4 页: 1059-1074 DOI: 10.1002/ese3.358 出版年: AUG 2019

Web of Science 核心合集中的 "被引频次": 32

被引频次合计: 32

摘要: China is vigorously promoting the development of coalbed methane (CBM) resources because CBM is cleaner than coal and a hazardous gas in coal mining. However, the CBM production in China is significantly lower than that in other coal-rich countries, such as Australia and the United States. In this paper, the main problems hindering CBM development in China are discussed to provide management suggestions for the government. These key problems include exploration and development techniques, the overlap of mining rights, management, financial supporting policy, investment environment, regulations, and market conditions. The results of this study indicate that to improve the development of the CBM industry in China, national and local governments must enact specific and exercisable regulations to increase financial support, improve technology, increase investment in CBM exploration, strengthen public project establishment, and improve the reform of CBM exploration and development policies.

入藏号: WOS:000479313100002

出版商: WILEY

出版商地址: 111 RIVER ST, HOBOKEN 07030-5774, NJ USA

Web of Science 类别: Energy & Fuels

ISSN: 2050-0505

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 63 条，共 381 条

标题: The Role of Polarization in Photocatalysis

作者: Chen, F (Chen, Fang); Huang, HW (Huang, Hongwei); Guo, L (Guo, Lin); Zhang, YH (Zhang, Yihe); Ma, TY (Ma, Tianyi)

来源出版物: ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 卷: 58 期: 30 页: 10061-10073 DOI: 10.1002/anie.201901361 出版年: JUL 22 2019

Web of Science 核心合集中的 "被引频次": 204

被引频次合计: 204

摘要: Semiconductor photocatalysis as a desirable technology shows great potential in environmental remediation and renewable energy generation, but its efficiency is severely restricted by the rapid recombination of charge carriers in the bulk phase and on the surface of photocatalysts. Polarization has emerged as one of the most effective strategies for addressing the above-mentioned issues, thus effectively promoting photocatalysis. This review summarizes the recent advances on improvements of photocatalytic activity by polarization-promoted bulk and surface charge separation. Highlighted is the recent progress in charge separation advanced by different types of polarization, such as macroscopic polarization, piezoelectric polarization, ferroelectric polarization, and surface polarization, and the related mechanisms. Finally, the strategies and challenges for polarization enhancement to further enhance charge separation and photocatalysis are discussed.

入藏号: WOS:000476452700004

PubMed ID: 30794343

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary

ISSN: 1433-7851

eISSN: 1521-3773

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 64 条，共 381 条

标题: New Particle Formation in the Atmosphere: From Molecular Clusters to Global Climate

作者: Lee, SH (Lee, Shan-Hu); Gordon, H (Gordon, Hamish); Yu, H (Yu, Huan); Lehtipalo, K (Lehtipalo, Katrianne); Haley, R (Haley, Ryan); Li, YX (Li, Yixin); Zhang, RY (Zhang, Renyi)

来源出版物: JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES 卷: 124 期: 13 页: 7098-7146 DOI: 10.1029/2018JD029356 出版年: JUL 16 2019

Web of Science 核心合集中的 "被引频次": 24

被引频次合计: 24

摘要: New particle formation (NPF) represents the first step in the complex processes leading to formation of cloud condensation nuclei. Newly formed nanoparticles affect human health, air quality, weather, and climate. This review provides a brief history, synthesizes recent significant progresses, and outlines the challenges and future directions for research relevant to NPF. New developments include the emergence of state-of-the-art instruments that measure prenucleation clusters and newly nucleated nanoparticles down to about 1 nm; systematic laboratory studies of multicomponent nucleation systems, including collaborative experiments conducted in the Cosmics Leaving Outdoor Droplets chamber at CERN; observations of NPF in different types of forests, extremely polluted urban locations, coastal sites, polar regions, and high-elevation sites; and improved nucleation theories and parameterizations to account for NPF in atmospheric models. The challenges include the lack of understanding of the fundamental chemical mechanisms responsible for aerosol nucleation and growth under diverse environments, the effects of SO2 and NOx on NPF, and the contribution of anthropogenic organic compounds to NPF. It is also critical to develop instruments that can detect chemical composition of particles from 3 to 20 nm and improve parameterizations to represent NPF over a wide range of atmospheric conditions of chemical precursor, temperature, and humidity.

Plain Language Summary In the atmosphere, invisible to the human eye, there are many microscopic particles, or nanoparticles, that affect human health, air quality, and climate. We do not fully understand the chemical processes that allow these fine particles to form and be suspended in the air nor how they influence heat flow in Earth's atmosphere. Laboratory experiments, field observations, and modeling simulations have all shown different results for how these particles behave. These inconsistencies make it difficult to accurately represent the processes of new particle formation in regional and global atmospheric models. Scientists still need to develop instruments that can measure the smallest range of nanoparticles and to find ways to describe particle formation that allow for differences in temperature, humidity, and level of pollution.

入藏号: WOS:000477580200028

出版商: AMER GEOPHYSICAL UNION

出版商地址: 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Web of Science 类别: Meteorology & Atmospheric Sciences

ISSN: 2169-897X

eISSN: 2169-8996

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 65 条，共 381 条

标题: Nanomaterials in Superlubricity

作者: Zhai, WZ (Zhai, Wenzheng); Zhou, K (Zhou, Kun)

来源出版物: ADVANCED FUNCTIONAL MATERIALS 卷: 29 期: 28 文献号: 1806395 DOI: 10.1002/adfm.201806395 出版年: JUL 2019

Web of Science 核心合集中的 "被引频次": 49

被引频次合计: 48

摘要: The vanishing friction, known as superlubricity, is potentially a significant performance indicator in the development of nanostructured materials and has become increasingly important for realizing energy saving and extending the life of mechanical components. Herein, a systematic review of recent progress in nanomaterials for achieving the superlubric state is provided, beginning with a brief introduction of nanostructured materials in superlubricity and its wide potential applications. Subsequently, a detailed discussion of experimental and simulation works on the different spatial structures of nanomaterials associated with size effects ranging from 0D to 3D nanostructures is given, with an emphasis on solid and liquid superlubricity. Finally, this work concludes with perspectives on the challenges and future directions for developing nanomaterials in the field of superlubricity.

入藏号: WOS:000478851700001

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary; Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied; Physics, Condensed Matter

ISSN: 1616-301X

eISSN: 1616-3028

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 66 条，共 381 条

标题: Surface-Halogenation-Induced Atomic-Site Activation and Local Charge Separation for Superb CO2 Photoreduction

作者: Hao, L (Hao, Lin); Kang, L (Kang, Lei); Huang, HW (Huang, Hongwei); Ye, LQ (Ye, Liqun); Han, KL (Han, Keli); Yang, SQ (Yang, Songqiu); Yu, HJ (Yu, Hongjian); Batmunkh, M (Batmunkh, Munkhbayar); Zhang, YH (Zhang, Yihe); Ma, TY (Ma, Tianyi)

来源出版物: ADVANCED MATERIALS 卷: 31 期: 25 文献号: 1900546 DOI: 10.1002/adma.201900546 出版年: JUN 2019

Web of Science 核心合集中的 "被引频次": 145

被引频次合计: 145

摘要: Solar-energy-driven CO2 conversion into value-added chemical fuels holds great potential in renewable energy generation. However, the rapid recombination of charge carriers and deficient reactive sites, as two major obstacles, severely hampers the photocatalytic CO2 reduction activity. Herein, a desirable surface halogenation strategy to address the aforementioned concerns over a Sillen-related layer-structured photocatalyst Bi2O2(OH)(NO3) (BON) is demonstrated. The surface halogen ions that are anchored on the Bi atoms by replacing surface hydroxyls on the one hand facilitate the local charge separation, and, on the other hand, activate the hydroxyls that profoundly boost the adsorption of CO2 molecules and protons and facilitate the CO2 conversion process, as evidenced by experimental and theoretical results collectively. Among the three series of BON-X (X = Cl, Br, and I) catalysts, BON-Br shows the most substantially enhanced CO production rate (8.12 mu mol g(-1) h(-1)) without any sacrificial agents or cocatalysts, approximate to 73 times higher than that of pristine Bi2O2(OH)(NO3), also exceeding that of the state-of-the-art photocatalysts reported to date. This work presents a surface polarization protocol for engineering charge behavior and reactive sites to promote photocatalysis, which shows great promise to the future design of high-performance materials for clean energy production.

入藏号: WOS:000475269900001

PubMed ID: 31058378

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary; Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied; Physics, Condensed Matter

ISSN: 0935-9648

eISSN: 1521-4095

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 67 条，共 381 条

标题: A Global Plate Model Including Lithospheric Deformation Along Major Rifts and Orogens Since the Triassic

作者: Muller, RD (Muller, R. Dietmar); Zahirovic, S (Zahirovic, Sabin); Williams, SE (Williams, Simon E.); Cannon, J (Cannon, John); Seton, M (Seton, Maria); Bower, DJ (Bower, Dan J.); Tetley, MG (Tetley, Michael G.); Heine, C (Heine, Christian); Le Breton, E (Le Breton, Eline); Liu, SF (Liu, Shaofeng); Russell, SHJ (Russell, Samuel H. J.); Yang, T (Yang, Ting); Leonard, J (Leonard, Jonathon); Gurnis, M (Gurnis, Michael)

来源出版物: TECTONICS 卷: 38 期: 6 页: 1884-1907 DOI: 10.1029/2018TC005462 出版年: JUN 2019

Web of Science 核心合集中的 "被引频次": 30

被引频次合计: 33

摘要: Global deep-time plate motion models have traditionally followed a classical rigid plate approach, even though plate deformation is known to be significant. Here we present a global Mesozoic-Cenozoic deforming plate motion model that captures the progressive extension of all continental margins since the initiation of rifting within Pangea at similar to 240 Ma. The model also includes major failed continental rifts and compressional deformation along collision zones. The outlines and timing of regional deformation episodes are reconstructed from a wealth of published regional tectonic models and associated geological and geophysical data. We reconstruct absolute plate motions in a mantle reference frame with a joint global inversion using hot spot tracks for the last 80 million years and minimizing global trench migration velocities and net lithospheric rotation. In our optimized model, net rotation is consistently below 0.2 degrees/Myr, and trench migration scatter is substantially reduced. Distributed plate deformation reaches a Mesozoic peak of 30 x 10(6) km(2) in the Late Jurassic (similar to 160-155 Ma), driven by a vast network of rift systems. After a mid-Cretaceous drop in deformation, it reaches a high of 48 x 10(6) km(2) in the Late Eocene (similar to 35 Ma), driven by the progressive growth of plate collisions and the formation of new rift systems. About a third of the continental crustal area has been deformed since 240 Ma, partitioned roughly into 65% extension and 35% compression. This community plate model provides a framework for building detailed regional deforming plate networks and form a constraint for models of basin evolution and the plate-mantle system.

入藏号: WOS:000475363100003

出版商: AMER GEOPHYSICAL UNION

出版商地址: 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0278-7407

eISSN: 1944-9194

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 68 条，共 381 条

标题: The relationship between visual enclosure for neighbourhood street walkability and elders' mental health in China: Using street view images

作者: Wang, RY (Wang, Ruoyu); Lu, Y (Lu, Yi); Zhang, JB (Zhang, Jinbao); Liu, PH (Liu, Penghua); Yao, Y (Yao, Yao); Liu, Y (Liu, Ye)

来源出版物: JOURNAL OF TRANSPORT & HEALTH 卷: 13 页: 90-102 DOI: 10.1016/j.jth.2019.02.009 出版年: JUN 2019

Web of Science 核心合集中的 "被引频次": 19

被引频次合计: 20

摘要: Background: Neighbourhood walkability has been consistently associated with more physical activities in adults. Nevertheless, evidence of a beneficial association between walkability and older adults' mental health is still scarce in developing countries. Furthermore, walkability was often measured through Geographic Information System (GIS) methods. Recently, the methodological development in street view images, such as using Google or Tencent Street View, has offered an attractive alternative.

Methods: Using Tencent street view images and machine learning classification methods, we quantify visual enclosure for neighbourhood street walkability with the proportion of visible sky in those images. Depression and anxiety data were extracted from mental health surveys for 1231 older adults in Beijing, China in 2011. Multilevel linear regression models were used to assess the associations.

Results: Street walkability was negatively associated with Geriatric Depression Scale scores (GDS 15-item) and Geriatric Anxiety Inventory scores (GAI 20-item), and the results of different robustness checks also support this relationship. The associations were stronger for disadvantaged older adults than others.

Conclusion: The present study indicates a potential beneficial role of street walkability on mental health (depression and anxiety) in older residents, especially for disadvantaged older adults. Additional longitudinal studies are required to address some limitations of this study, such as residential self-selection bias.

入藏号: WOS:000471920600012

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Public, Environmental & Occupational Health; Transportation

ISSN: 2214-1405

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 69 条，共 381 条

标题: Defining the morphological quality of fossil footprints. Problems and principles of preservation in tetrapod ichnology with examples from the Palaeozoic to the present

作者: Marchetti, L (Marchetti, Lorenzo); Belvedere, M (Belvedere, Matteo); Voigt, S (Voigt, Sebastian); Klein, H (Klein, Hendrik); Castanera, D (Castanera, Diego); Diaz-Martinez, I (Diaz-Martinez, Ignacio); Marty, D (Marty, Daniel); Xing, LD (Xing, Lida); Feola, S (Feola, Silverio); Melchor, RN (Melchor, Ricardo N.); Farlow, JO (Farlow, James O.)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 193 页: 109-145 DOI: 10.1016/j.earscirev.2019.04.008 出版年: JUN 2019

Web of Science 核心合集中的 "被引频次": 39

被引频次合计: 39

摘要: The morphology of fossil footprints is the basis of vertebrate footprint ichnology. However, the processes acting during and after trace fossil registration which are responsible for the final morphology have never been precisely defined, resulting in a dearth of nomenclature. Therefore, we discuss the concepts of ichnotaphonomy, ichnostratinomy, taphonomy, biostratinomy, registration and diagenesis and describe the processes acting on footprint morphology. In order to evaluate the morphological quality of tetrapod footprints, we introduce the concept of morphological preservation, which is related to the morphological quality of footprints (M-preservation, acronym MP), and distinguish it from physical preservation (P-preservation, acronym PP), which characterizes whether or not a track is eliminated by taphonomic and diagenetic processes. M-preservation includes all the morphological features produced during and after track registration prior to its study, and may be divided into substages (ichnostratinomic, registrational, taphonomic, stratinomic, diagenetic). Moreover, we propose an updated numerical preservation scale for M-preservation. It ranges from 0.0 (worst preservation) to 3.0 (best preservation); intermediate values may be used and specific features may be indicated by letters. In vertebrate footprint ichnotaxonomy, we regard the anatomy-consistent morphology and to a lesser extent the trackway pattern as the only acceptable ichnotaxobases. Only footprints showing a good morphological preservation (grade 2.0-3.0) are useful in ichnotaxonomy, whereas ichnotaxa based on poor morphological preservation (grade 0.0-1.5) are considered ichnotaphotaxa (nomina dubia) characterized by extramorphologies. We applied the preservation scale on examples from the Palaeozoic to the present time, including three ichnotaphotaxa and 18 anatomy-consistent ichnotaxa/morphotypes attributed to several vertebrate footprint producers. Results indicate the utility, feasibility and suitability of this method for the entire vertebrate footprint record in any lithofacies, strongly recommending its use in future ichnotaxonomic studies.

入藏号: WOS:000470940800006

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 70 条，共 381 条

标题: The accuracy and efficiency of GA and PSO optimization schemes on estimating reaction kinetic parameters of biomass pyrolysis

作者: Ding, YM (Ding, Yanming); Zhang, WL (Zhang, Wenlong); Yu, L (Yu, Lei); Lu, KH (Lu, Kaihua)

来源出版物: ENERGY 卷: 176 页: 582-588 DOI: 10.1016/j.energy.2019.04.030 出版年: JUN 1 2019

Web of Science 核心合集中的 "被引频次": 46

被引频次合计: 46

摘要: Reaction kinetic parameters estimation of biomass pyrolysis is a relatively difficult optimization problem due to the complexity of pyrolysis model. Two common heuristic algorithms, Genetic Algorithm (GA) and Particle Swarm Optimization (PSO), are applied to estimate the kinetic parameters of three-component parallel reaction mechanism based on the thermogravimetric experiment in wide heating rates. The accuracy and efficiency of GA and PSO algorithms are compared with each other under the identical optimization conditions. The results indicate the better optimization abilities of PSO with the closer convergence solution to the global optimum and quicker convergence to the solution than GA based on the three-component parallel reaction mechanism of biomass pyrolysis. Especially, the improvement of best fitting value of PSO reaches up to 30% compared with that of GA. Furthermore, 14 estimated kinetic parameters of best fitting value are obtained and the mass loss rate predicted results including three separate components (hemicellulose, cellulose and lignin) are compared with experimental data. (C) 2019 Elsevier Ltd. All rights reserved.

入藏号: WOS:000470939500047

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Thermodynamics; Energy & Fuels

ISSN: 0360-5442

eISSN: 1873-6785

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 71 条，共 381 条

标题: Evaluation indexes of coalbed methane accumulation in the strong deformed strike-slip fault zone considering tectonics and fractures: a 3D geomechanical simulation study

作者: Yin, S (Yin, Shuai); Ding, WL (Ding, Wenlong)

来源出版物: GEOLOGICAL MAGAZINE 卷: 156 期: 6 页: 1052-1068 文献号: PII S0016756818000456 DOI: 10.1017/S0016756818000456 出版年: JUN 2019

Web of Science 核心合集中的 "被引频次": 36

被引频次合计: 37

摘要: Both the deformation and rupture characteristics of rocks are related to geomechanics. In this paper, we identify the evaluation indexes related to coalbed methane (CBM) accumulation in strongly deformed strike-slip fault zones considering tectonics and fractures. We found that fault scale, the fault combination, the tectonic stress, the preservation conditions and fractures all have important effects on the CBM distribution. Areas near the large-scale opening faults are unfavourable to the preservation of coalbed methane. The distribution of gas wells with different capacities is influenced by tectonic extension and convergence. A 3D geomechanical method was used to analyse the influence of the 'ribbon effect' of strike-slip faults on the CBM distribution. Due to the influence of the 'ribbon effect', the tectonic stress presents a plane in situ stress heterogeneity, which in turn will affect the gas well productivity. We also calculated the integrated rupture rate (I-F) to characterize the degree of tectonic fracture development in the target coal reservoir. The appropriate fracture development degree can improve the petrophysical properties of the coal reservoirs while maintaining good storage conditions, such that the gas wells can achieve a higher production capacity. This study is of great significance for the enrichment of the geomechanical theory of oil and gas exploration.

入藏号: WOS:000466534300007

出版商: CAMBRIDGE UNIV PRESS

出版商地址: 32 AVENUE OF THE AMERICAS, NEW YORK, NY 10013-2473 USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0016-7568

eISSN: 1469-5081

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 72 条，共 381 条

标题: Promoting ring-opening efficiency for suppressing toxic intermediates during photocatalytic toluene degradation via surface oxygen vacancies

作者: Dong, XA (Dong, Xing'an); Cui, W (Cui, Wen); Wang, H (Wang, Hong); Li, JY (Li, Jieyuan); Sun, YJ (Sun, Yanjuan); Wang, HN (Wang, Haicnang); Zhang, YX (Zhang, Yuxin); Huang, HW (Huang, Hongwei); Dong, F (Dong, Fan)

来源出版物: SCIENCE BULLETIN 卷: 64 期: 10 页: 669-678 DOI: 10.1016/j.scib.2019.04.020 出版年: MAY 30 2019

Web of Science 核心合集中的 "被引频次": 49

被引频次合计: 51

摘要: Aromatic ring-opening process is well recognized as the rate-determining step for catalytic toluene degradation. In photocatalytic toluene degradation, the toxic intermediates with harmful effects may be generated. To clarify the precise reaction mechanism and control the toxic intermediates generation, a closely combined in situ DRIFTS and DFT calculation is utilized to address these important issues. We construct the BiOCl with oxygen vacancies (OVs) and reveal the structure of OVs. The defect level caused by oxygen vacancies could promote the light adsorption and charge separation, which further boosts the activation of ring-opening species and enhances the generation process of free radicals. The reaction energy barriers of four possible ring-opening processes on defective BiOCl (OVBOC) are all declined in comparison with perfect BiOCl (BOC). The existence of oxygen vacancies could smooth the rate-determining step so the ring-opening efficiency of photocatalytic toluene degradation is highly increased. Most importantly, the methyl species would be further oxidized and tend to open the benzene-ring at benzoic acid on BOC while the ring would be broken at the benzyl alcohol on OVBOC. These results indicate that the toluene degradation pathway is shortened via the surface OVs, which enables the production of radicals with high oxidation capability for the accelerated chain scission of the ring-opening intermediates. Finally, the efficiency of the key ring-opening process could be enormously improved and toxic intermediates are effectively restrained. The present work could provide new insights into the design of high-performance photocatalysts for efficient and safe degradation of VOCs in air. (C) 2019 Science China Press. Published by Elsevier B.V. and Science China Press. All rights reserved.

入藏号: WOS:000472946200007

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Multidisciplinary Sciences

ISSN: 2095-9273

eISSN: 2095-9281

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 73 条，共 381 条

标题: Intercomparison in spatial distributions and temporal trends derived from multi-source satellite aerosol products

作者: Wei, J (Wei, Jing); Peng, YR (Peng, Yiran); Mahmood, R (Mahmood, Rashed); Sun, L (Sun, Lin); Guo, JP (Guo, Jianping)

来源出版物: ATMOSPHERIC CHEMISTRY AND PHYSICS 卷: 19 期: 10 页: 7183-7207 DOI: 10.5194/acp-19-7183-2019 出版年: MAY 29 2019

Web of Science 核心合集中的 "被引频次": 30

被引频次合计: 30

摘要: Satellite-derived aerosol products provide long-term and large-scale observations for analysing aerosol distributions and variations, climate-scale aerosol simulations, and aerosol-climate interactions. Therefore, a better understanding of the consistencies and differences among multiple aerosol products is important. The objective of this study is to compare 11 global monthly aerosol optical depth (AOD) products, which are the European Space Agency Climate Change Initiative (ESA-CCI) Advanced Along-Track Scanning Radiometer (AATSR), Advanced Very High Resolution Radiometer (AVHRR), Multi-angle Imaging SpectroRadiometer (MISR), Moderate Resolution Imaging Spectroradiometer (MODIS), Sea-viewing Wide Field-of-view Sensor (SeaWiFS), Visible Infrared Imaging Radiometer (VI-IRS), and POLarization and Directionality of the Earth's Reflectance (POLDER) products. AErosol RObotic NEtwork (AERONET) Version 3 Level 2.0 monthly measurements at 308 sites around the world are selected for comparison. Our results illustrate that the spatial distributions and temporal variations of most aerosol products are highly consistent globally but exhibit certain differences on regional and site scales. In general, the AATSR Dual View (ADV) and SeaWiFS products show the lowest spatial coverage with numerous missing values, while the MODIS products can cover most areas (average of 87 %) of the world. The best performance is observed in September-October-November (SON) and the worst is in June-July-August (JJA). All the products perform unsatisfactorily over northern Africa and Middle East, southern and eastern Asia, and their coastal areas due to the influence from surface brightness and human activities. In general, the MODIS products show the best agreement with the AERONET-based AOD values on different spatial scales among all the products. Furthermore, all aerosol products can capture the correct aerosol trends at most cases, especially in areas where aerosols change significantly. The MODIS products perform best in capturing the global temporal variations in aerosols. These results provide a reference for users to select appropriate aerosol products for their particular studies.

入藏号: WOS:000469787400001

出版商: COPERNICUS GESELLSCHAFT MBH

出版商地址: BAHNHOFSALLEE 1E, GOTTINGEN, 37081, GERMANY

Web of Science 类别: Environmental Sciences; Meteorology & Atmospheric Sciences

ISSN: 1680-7316

eISSN: 1680-7324

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 74 条，共 381 条

标题: Rational nanostructure design of graphitic carbon nitride for photocatalytic applications

作者: Tian, N (Tian, Na); Huang, HW (Huang, Hongwei); Du, X (Du, Xin); Dong, F (Dong, Fan); Zhang, YH (Zhang, Yihe)

来源出版物: JOURNAL OF MATERIALS CHEMISTRY A 卷: 7 期: 19 页: 11584-11612 DOI: 10.1039/c9ta01819k 出版年: MAY 21 2019

Web of Science 核心合集中的 "被引频次": 43

被引频次合计: 43

摘要: Semiconductor photocatalysts have important applications in the fields of renewable energy production and environmental remediation. To overcome the drawbacks in the photocatalytic process, such as weak photoabsorption, low charge separation efficiency and insufficient surface reactive sites, many strategies have been developed in the past few decades. This review attempts to provide a comprehensive summary and update of some fundamental issues in nanostructure design of graphitic carbon nitride (g-C3N4). We focus especially on recent progress in designing and fabricating g-C3N4 photocatalysts with various dimensional structures, such as zero-dimensional quantum dots, one-dimensional nanorods and nanotubes, two-dimensional nanosheets, and three-dimensional nanospheres and nanoflowers, identifying the key factors in determining the photocatalytic efficiency, enumerating the wide range of new applications of g-C3N4 photocatalysts, and finally highlighting the crucial issues that should be addressed in the future in the aforementioned interesting research areas.

入藏号: WOS:000472465300001

出版商: ROYAL SOC CHEMISTRY

出版商地址: THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS, ENGLAND

Web of Science 类别: Chemistry, Physical; Energy & Fuels; Materials Science, Multidisciplinary

ISSN: 2050-7488

eISSN: 2050-7496

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 75 条，共 381 条

标题: Comparison of convolutional neural networks for landslide susceptibility mapping in Yanshan County, China

作者: Wang, Y (Wang, Yi); Fang, ZC (Fang, Zhice); Hong, HY (Hong, Haoyuan)

来源出版物: SCIENCE OF THE TOTAL ENVIRONMENT 卷: 666 页: 975-993 DOI: 10.1016/j.scitotenv.2019.02.263 出版年: MAY 20 2019

Web of Science 核心合集中的 "被引频次": 51

被引频次合计: 52

摘要: Assessments of landslide disasters are becoming increasingly urgent. The aim of this study is to investigate a convolutional neural network (CNN) framework for landslide susceptibility mapping (LSM) in Yanshan County, China. The two primary contributions of this study arc summarized as follows. First. W the best of our knowledge, this report describes the first time that the CNN framework is used for LSM.Second, different data representation algorithms arc developed to construct three novel CNN architectures. In this work, sixteen influencing factors associated with landslide occurrence were considered and historical landslide locations were randomly divided into training (70% of the total) and validation (30%) sets. Validation of these CNNs was performed using different commonly used measures in comparison to several of the most popular machine learning and deep learning methods. The experimental results demonstrated that the proportions of highly susceptible zones in all of the CNN landslide susceptibility maps are highly similar and lower than 30%, which indicates that these CNNs are more practical for landslide prevention and management than conventional methods. Furthermore, the proposed CNN framework achieved higher or comparable prediction accuracy. Specifically, the proposed CNNs were 3.94%-7.45% and 0.079-0.151 higher than those of the optimized support vector machine (SVM) in terms of overall accuracy (OA) and Matthews correlation coefficient (MCC), respectively. (C) 2019 Elsevier B.V. All rights reserved.

入藏号: WOS:000463180700094

PubMed ID: 30970504

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Environmental Sciences

ISSN: 0048-9697

eISSN: 1879-1026

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 76 条，共 381 条

标题: Mesozoic tectono-magmatic response in the East Asian ocean-continent connection zone to subduction of the Paleo-Pacific Plate

作者: Li, SZ (Li, Sanzhong); Suo, YH (Suo, Yanhui); Li, XY (Li, Xiyao); Zho, J (Zho, Jie); Santosh, M (Santosh, M.); Wang, PC (Wang, Pengcheng); Wang, GZ (Wang, Guangzeng); Guo, LL (Guo, Lingli); Yu, SY (Yu, Shengyao); Lan, HY (Lan, Haoyuan); Dai, LM (Dai, Liming); Zhou, ZZ (Zhou, Zaizhen); Cao, XZ (Cao, Xianzhi); Zhu, JJ (Zhu, Junjiang); Liu, B (Liu, Bo); Jiang, SH (Jiang, Suhua); Wang, G (Wang, Gang); Zhang, GW (Zhang, Guowei)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 192 页: 91-137 DOI: 10.1016/j.earscirev.2019.03.003 出版年: MAY 2019

Web of Science 核心合集中的 "被引频次": 48

被引频次合计: 56

摘要: The Mesozoic Western Pacific subduction system significantly impacted the North China and South China blocks along the East Asian continental margin and influenced the tectonic, magmatic, metallogenic and geomorphic evolution of the region. However, the dynamics and impact on the zone along the East Asian ocean-continent connection zone remain debated. Here we provide a comprehensive synthesis of the state-of-the-art information from deformation analysis, magmatism, geochronology, tomography and other fields from this region. We evaluate first the pre-Yanshanian (pre-Jurassic) final assembly of blocks and the Late Triassic formation of the unified continental margin in East China. We then focus on the Jurassic and Cretaceous geological processes in the East Asian ocean-continent connection zone. The temporal and spatial evolution of structural propagation, sedimentary depocentre, age zonation and migration of magrnatism, as well as the large-scale tectono-morphological inversion in the Earth surface system combined with deep processes, are probed. In the early Yanshannian Period (Early and Middle Jurassic, 200-160 Ma), the destruction of the North China Craton (NCC) was mainly affected by the westward early-stage layered rollback, and stepwise delamination and thinning of its continental lithosphere, resulting in the early Yanshanian westward migration of tectonism and magmatism.

Coevally, the combined effect of the closure of the Mongal-Okhotsk Ocean to the north and the subduction of the Bangong-Co- Nujiang Ocean to the south imparted an overall compressional setting in the East Asian OceanContinent Connection Zone (EAOCCZ). The centres of asthenospheric upwelling and mantle extrusion at depth continued to migrate eastward, driving the eastward lithospheric thinning with periodic and alternating extension and compression. The South China Block experienced a westward flat subduction during the early Yanshanian Period, resulting in the westward propagation of deformation and magmatism, followed by late twostage delamination to induce the eastward tectono-magmatism. The difference in tectono-magmatic styles between the North China and South China blocks is a result of the different mechanisms and syles of the deep delamination processes under the superconvergence regime of the East Asian and adjacent plates. Especially delamination under North China generated the northwestward layered and fractured subcontinental lithospheric mantle, whereas under the eastern South China Block, were the oceanic lithospheric mantle of the Paleo- Pacific Plate that underwent flat subduction, or continental garnet peridotite mantle. In the middle Yanshanian Period (Late Jurassic to early Early Cretaceous, 160-125 Ma), the EAOCCZ underwent escape tectonics to form some basins related to strike slip faulting. Generally the extensional basins in the tails of the triangular-shaped escape blocks are perpendicular to the extrusion direction. The transtensional or transpressional basins are controlled by the strike slip faults distributed on both sides of the triangular block, and the flexural basins occur in front. In the late Yanshanian Period (late Early Cretaceous-Late Cretaceous, 125-65 Ma), the Paleo-Pacific (Izanagi) Plate subducted NNW-ward beneath the Eurasian continent, and the subduction angles changed gradually following eastward mantle extrusion induced by the closure of the Okhotsk Ocean to the north and Bangong-Nujiang Ocean to the south, as well as the rollback and subduction retreat of the Paleo-Pacific Plate to the east. The EAOCCZ gradually experienced lithospheric collapse and the formation of metamorphic core complexes, as well as obvious landscape reversal. During 70-45 Ma, the Izanagi-Pacific Ridge subducted beneath the EAOCCZ to induce wide uplift resulting in the formation of the Cenozoic dextral transtension-related basins.

入藏号: WOS:000474499500005

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 77 条，共 381 条

标题: Progress on the Photocatalytic Reduction Removal of Chromium Contamination

作者: Zhao, ZY (Zhao, Zengying); An, H (An, He); Lin, J (Lin, Jing); Feng, MC (Feng, Mingchao); Murugadoss, V (Murugadoss, Vignesh); Ding, T (Ding, Tao); Liu, H (Liu, Hu); Shao, Q (Shao, Qian); Mai, XM (Mai, Xianmin); Wang, N (Wang, Ning); Gu, HB (Gu, Hongbo); Angaiah, S (Angaiah, Subramania); Guo, ZH (Guo, Zhanhu)

来源出版物: CHEMICAL RECORD 卷: 19 期: 5 页: 873-882 DOI: 10.1002/tcr.201800153 出版年: MAY 2019

Web of Science 核心合集中的 "被引频次": 76

被引频次合计: 76

摘要: Rapid industrialization leads to increased wastewater discharge encompassing hexavalent chromium (Cr(VI)), which leads to serious environmental problems of toxicity and potential carcinogenicity. Removal of these species is normally carried out by ion-exchange, precipitation, membrane filtration, sorption, photocatalytic reduction, etc. This review mainly focuses on the photocatalytic and photoelectrocatalytic (PEC) reduction of Cr (VI), because of their advantages over other methods such as reduced risk of secondary pollution by non-reduced Cr (VI), no sludge formation, no need for a large amount of chemical reagents, clean and easy installation. The main factors influencing the photocatalytic reduction efficiency of Cr (VI) such as catalyst activity, solution pH, Cr adsorption on the catalyst and additives, are briefly discussed. Finally, a special emphasis is provided to the photoelectrocatalytic (PEC) reduction of Cr (VI).

入藏号: WOS:000471344700004

PubMed ID: 30426677

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary

ISSN: 1527-8999

eISSN: 1528-0691

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 78 条，共 381 条

标题: Using deep learning to examine street view green and blue spaces and their associations with geriatric depression in Beijing, China

作者: Helbich, M (Helbich, Marco); Yao, Y (Yao, Yao); Liu, Y (Liu, Ye); Zhang, JB (Zhang, Jinbao); Liu, PH (Liu, Penghua); Wang, RY (Wang, Ruoyu)

来源出版物: ENVIRONMENT INTERNATIONAL 卷: 126 页: 107-117 DOI: 10.1016/j.envint.2019.02.013 出版年: MAY 2019

Web of Science 核心合集中的 "被引频次": 70

被引频次合计: 74

摘要: Background: Residential green and blue spaces may be therapeutic for the mental health. However, solid evidence on the linkage between exposure to green and blue spaces and mental health among the elderly in non-Western countries is scarce and limited to exposure metrics based on remote sensing images (i.e., land cover and vegetation indices). Such overhead-view measures may fail to capture how people perceive the environment on the site.

Objective: This study aimed to compare streetscape metrics derived from street view images with satellite-derived ones for the assessment of green and blue space; and to examine associations between exposure to green and blue spaces as well as geriatric depression in Beijing, China.

Methods: Questionnaire data on 1190 participants aged 60 or above were analyzed cross-sectionally. Depressive symptoms were assessed through the shortened Geriatric Depression Scale (GDS-15). Streetscape green and blue spaces were extracted from Tencent Street View data by a fully convolutional neural network. Indicators derived from street view images were compared with a satellite-based normalized difference vegetation index (NDVI), a normalized difference water index (NDWI), and those derived from GlobeLand30 land cover data on a neighborhood level. Multilevel regressions with neighborhood-level random effects were fitted to assess correlations between GDS-15 scores and these green and blue spaces exposure metrics.

Results: The average cumulative GDS-15 score was 3.4 (i.e., no depressive symptoms). Metrics of green and blue space derived from street view images were not correlated with satellite-based ones. While NDVI was highly correlated with GlobeLand30 green space, NDWI was moderately correlated with GlobeLand30 blue space. Multilevel regressions showed that both street view green and blue spaces were inversely associated with GDS-15 scores and achieved the highest model goodness-of-fit. No significant associations were found with NDVI, NDWI, and GlobeLand30 green and blue space. Our results passed robustness tests.

Conclusion: Our findings provide support that street view green and blue spaces are protective against depression for the elderly in China, yet longitudinal confirmation to infer causality is necessary. Street view and satellite-derived green and blue space measures represent different aspects of natural environments. Both street view data and deep learning are valuable tools for automated environmental exposure assessments for health-related studies.

入藏号: WOS:000462597500013

PubMed ID: 30797100

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Environmental Sciences

ISSN: 0160-4120

eISSN: 1873-6750

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 79 条，共 381 条

标题: Sampled-data stabilization of chaotic systems based on a T-S fuzzy model

作者: Zeng, HB (Zeng, Hong-Bing); Teo, KL (Teo, Kok Lay); He, Y (He, Yong); Wang, W (Wang, Wei)

来源出版物: INFORMATION SCIENCES 卷: 483 页: 262-272 DOI: 10.1016/j.ins.2019.01.046 出版年: MAY 2019

Web of Science 核心合集中的 "被引频次": 43

被引频次合计: 45

摘要: This paper investigates the problem of stability and stabilization of a class of chaotic system through the use of sampled-data control. By employing a Takagi-Sugeno (T-S) fuzzy model to describe the chaotic system and using a time-dependent Lyapunov function, an exponential stability condition is derived for the resulting closed-loop systems with input saturation constraint. Based on this condition, a fuzzy sampled-data controller is designed to stabilize the systems under consideration. The results obtained in this paper are based on the actual characteristic of sampling model. They depend explicitly on both the upper and lower bounds of sampling intervals. The chaotic Lorenz system is considered and solved by using the proposed approach so as to demonstrate the benefits and the superiority of the proposed approach over existing methods. (C) 2019 Elsevier Inc. All rights reserved.

入藏号: WOS:000461531700015

出版商: ELSEVIER SCIENCE INC

出版商地址: STE 800, 230 PARK AVE, NEW YORK, NY 10169 USA

Web of Science 类别: Computer Science, Information Systems

ISSN: 0020-0255

eISSN: 1872-6291

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 80 条，共 381 条

标题: Bifurcation analysis of two disc dynamos with viscous friction and multiple time delays

作者: Wei, ZC (Wei, Zhouchao); Zhu, B (Zhu, Bin); Yang, J (Yang, Jing); Perc, M (Perc, Matjaz); Slavinec, M (Slavinec, Mitja)

来源出版物: APPLIED MATHEMATICS AND COMPUTATION 卷: 347 页: 265-281 DOI: 10.1016/j.amc.2018.10.090 出版年: APR 15 2019

Web of Science 核心合集中的 "被引频次": 27

被引频次合计: 27

摘要: The impact of multiple time delays on the dynamics of two disc dynamos with viscous friction is studied in this paper. We consider the stability of equilibrium states for different delay values, and determine the location of relevant Hopf bifurcations using the normal form method and the center manifold theory. By performing numerical calculations and analysis, we verify the validity of our analytically obtained results. Our research results reveal a classical period-doubling route towards deterministic chaos in the studied system, and play an important role for the better understanding of the complex dynamics of two disc dynamos with viscous friction subject to multiple time delays. (C) 2018 Elsevier Inc. All rights reserved.

入藏号: WOS:000454116700021

出版商: ELSEVIER SCIENCE INC

出版商地址: STE 800, 230 PARK AVE, NEW YORK, NY 10169 USA

Web of Science 类别: Mathematics, Applied

ISSN: 0096-3003

eISSN: 1873-5649

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 81 条，共 381 条

标题: Finite-time synchronization of memristor chaotic systems and its application in image encryption

作者: Wang, LM (Wang, Leimin); Dong, TD (Dong, Tiandu); Ge, MF (Ge, Ming-Feng)

来源出版物: APPLIED MATHEMATICS AND COMPUTATION 卷: 347 页: 293-305 DOI: 10.1016/j.amc.2018.11.017 出版年: APR 15 2019

Web of Science 核心合集中的 "被引频次": 36

被引频次合计: 36

摘要: This paper investigates the finite-time synchronization of memristor chaotic systems (MCSs). First, an emulator circuit of memristor is designed to implement the MCSs. Then, based on the presented emulator circuit, the model of the MCSs is provided and its finite-time synchronization problem is successfully achieved under the proposed controller. Thereafter, the stability analysis of the closed-loop dynamics is derived and the effectiveness of the theoretical results is testified via numerical simulations. Finally, an image encryption algorithm is proposed based on MCSs. The statistical performance analysis reflects the effectiveness of the image encryption algorithm and shows its potential applications in secure communication. (C) 2018 Elsevier Inc. All rights reserved.

入藏号: WOS:000454116700023

出版商: ELSEVIER SCIENCE INC

出版商地址: STE 800, 230 PARK AVE, NEW YORK, NY 10169 USA

Web of Science 类别: Mathematics, Applied

ISSN: 0096-3003

eISSN: 1873-5649

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 82 条，共 381 条

标题: Analysis of transmission dynamics for Zika virus on networks

作者: Li, L (Li, Li); Zhang, J (Zhang, Jie); Liu, C (Liu, Chen); Zhang, HT (Zhang, Hong-Tao); Wang, Y (Wang, Yi); Wang, Z (Wang, Zhen)

来源出版物: APPLIED MATHEMATICS AND COMPUTATION 卷: 347 页: 566-577 DOI: 10.1016/j.amc.2018.11.042 出版年: APR 15 2019

Web of Science 核心合集中的 "被引频次": 32

被引频次合计: 33

摘要: Transmission of Zika virus (ZIKV) is a serious problem in public health, which can make the babies suffer from microcephaly if their mothers are infected by ZIKV during pregnancy. In this paper, we develop a model of ZIKV transmission in Colombia on complex networks which considers both sexual transmission among humans and the transmission by an infective vector in the process of propagation. We estimate the basic reproduction number R-0 and prove that the disease-free equilibrium is globally asymptotically stable when R-0 < 1. In addition, we study the effects of sexual transmission and the transmission route by an infective vector on the process of propagation. Invasion regions of ZIKV were shown in two-parameters space. The obtained results may provide new insights for the control of ZIKV. (C) 2018 Published by Elsevier Inc.

入藏号: WOS:000454116700046

出版商: ELSEVIER SCIENCE INC

出版商地址: STE 800, 230 PARK AVE, NEW YORK, NY 10169 USA

Web of Science 类别: Mathematics, Applied

ISSN: 0096-3003

eISSN: 1873-5649

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 83 条，共 381 条

标题: Mechanisms of element precipitation in carbonatite-related rare-earth element deposits: Evidence from fluid inclusions in the Maoniuping deposit, Sichuan Province, southwestern China

作者: Zheng, X (Zheng, Xu); Liu, Y (Liu, Yan)

来源出版物: ORE GEOLOGY REVIEWS 卷: 107 页: 218-238 DOI: 10.1016/j.oregeorev.2019.02.021 出版年: APR 2019

Web of Science 核心合集中的 "被引频次": 25

被引频次合计: 27

摘要: Carbonatite-related rare-earth element (REE) deposits (CARDs) are the major global source of REEs. The ore forming fluids of CARDs usually comprise multiple components and record complicated evolutions. The Maoniuping REE deposit, located in the eastern Tibetan Plateau, is the second-largest CARD in China and contains total reserves of 3.17 Mt of light rare-earth oxides (REOs). Geochronological and geological data show that the deposit was formed at similar to 25 Ma and was only moderately affected by tectonic and hydrothermal activities, thereby allowing us to study the evolution of ore fluids as well as the mechanisms of REE mineralization. The Maoniuping REE deposit is spatially associated with a carbonatite-syenite complex and includes two sections: Guangtoushan and Dagudao. The Dagudao section is the main focus of exploration and hosts well-developed vein systems. In the uppermost vein system, minerals are zoned from the syenite wall-rock contact to the vein centers in the order of biotite, aegirine-augite, arfvedsonite, calcite, quartz, barite, fluorite, and bastnasite(Ce). Based on geological observations and the petrography of fluid inclusions, the mineralization processes are classified into magmatic, pegmatitic, hydrothermal I, hydrothermal II, and REE stages. The inclusions in these stages include melt (M), melt-fluid (M-L), pure CO2 (C), aqueous-CO2 (L-C), aqueous-CO2 with crystals (L - C + S), liquid-vapor aqueous with crystals (L - V + S), and liquid-vapor (L-V) type inclusions. The magmatic stage is marked by a carbonatite-syenite complex with minor bastnasite-(Ce), whereas the pegmatitic stage consists of coarse-grained calcite, barite, fluorite, and quartz that contain M, M-L, and L-C type inclusions with a fluid system of NaCl-Na2SO4-H2O-CO2 at high temperature ( > 600 degrees C) and high salinity ( > 45 wt% NaCl equiv.). The hydrothermal I stage is characterized by fenitization and is marked by aegirine-augite and arfvedsonite containing abundant L-V and few 1,-C type inclusions. This stage is characterized by high temperatures (similar to 480 degrees C) and moderate salinity (10.2-17.9 wt% NaCI equiv.), with a fluid system of NaCl-Na2SO4-H2O and minor CO2 and CH4 + C2H6. The hydrothermal II stage is dominated by L-C, L- C + S, L- V + S, and L-V type inclusions that are hosted in barite, calcite, fluorite, and quartz, and formed at moderate to high temperatures (260-350 degrees C), with a wide range of salinity (9.4-47.8 wt% NaCI equiv.), a fluid system of NaCl-Na2SO4-CO2-H2O, and abundant CH4 + C2H6. During the REE stage, pervasive bastnasite-(Ce) containing abundant L-V type and few L-C type inclusions crystallized under low temperatures (160-240 degrees C) and low salinities (8.8-13.1 wt% NaCI equiv.) with a fluid system of NaCl-H2O and minor CO2 and CH4 + C2H6.

The results of ion-chromatographic analysis show that the ore fluids are rich in Na+, K+, Cl-, F-, and (SO4)2-, and have low Cl- /(SO4)(2)(-) ratios (0.78-2.00), showing a marked contrast with the fluids of granite related REE deposits (Cl- /(SO4)(2)(-) > 50) and a similarity to subcontinental lithospheric mantle (SCLM). The SD and 8180fluid values and the high N-2/Ar ratios indicate that the ore fluids originated from carbonatitic magma and were dominated by magmatic water during the hydrothermal I stage, whereas magmatic and meteoric water co-existed during the hydrothermal II and REE stages. Moreover, the higher ratios of CO2/N-2 (9-64) and CO2/ CH4 (17-472) and the higher concentrations of CO2, CH4, C2H6, and N-2 in the hydrothermal II stage compared with the hydrothermal I stage are attributed to intense immiscibility that resulted from decompression and is constrained to temperatures of 310-350 C and pressures of 2.0-2.4 kbar. In contrast, microthermometric data and low CH4, C2H6, and N-2 contents for the REE stage show that fluid cooling and mixing with meteoric water played an important role during the intensive mineralization of this stage, which occurred under shallow open system conditions at temperatures of 200 C and pressures of < 0.5 kbar. The mineral assemblages, together with experimental petrology results, suggest that the REE transport capability of the hydrothermal fluids was due to the high contents of (SO4)(2-), Cl- and F- complexes. In addition, CO2 that separates during immiscibility is known to act as a buffer that constrains the pH of ore fluids. Thus, immiscibility during the hydrothermal II stage could have provided favorable conditions for the migration of REEs. The subsequent cooling of fluids, the involvement of meteoric water, and increased fluid pH, favored the precipitation of REEs in the Maoniuping deposit.

入藏号: WOS:000470194300014

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geology; Mineralogy; Mining & Mineral Processing

ISSN: 0169-1368

eISSN: 1872-7360

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 84 条，共 381 条

标题: A comprehensive evaluation of the development and utilization of China's regional renewable energy

作者: Yu, SW (Yu, Shiwei); Zheng, YL (Zheng, Yali); Li, LX (Li, Longxi)

来源出版物: ENERGY POLICY 卷: 127 页: 73-86 DOI: 10.1016/j.enpol.2018.11.056 出版年: APR 2019

Web of Science 核心合集中的 "被引频次": 22

被引频次合计: 22

摘要: This study proposes comprehensive evaluation criteria, involving aspects of energy, economy, environment, technology, and society ((ETS)-T-3), for the development and utilization of renewable energy (RE). The criteria consist of 22 indicators. The comprehensive performance, from 2011 to 2015, of 30 provincial regions in China with respect to renewable energy development and utilization (REDU) was evaluated on the basis of the (ETS)-T-3 criteria, using an analytic network process (ANP). The results show that the total comprehensive performance (2011-2015) of all the 30 provincial regions of China improved in general. There was a marked improvement in technology performance. Qinghai, Yunnan, and Sichuan ranked the top three in comprehensive performance of REDU, while the comprehensive performance of Shaanxi, Hainan, and Henan were the lowest. During the study period, while the comprehensive performance of most provincial regions such as Ningxia and Xinjiang increased, that of five provincial regions, including Tianjin and Hainan, decreased. The regional comprehensive performance was severely affected by the installed capacity and power generation of RE.

入藏号: WOS:000463688200009

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Economics; Energy & Fuels; Environmental Sciences; Environmental Studies

ISSN: 0301-4215

eISSN: 1873-6777

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 85 条，共 381 条

标题: Earth abundant materials beyond transition metal dichalcogenides: A focus on electrocatalyzing hydrogen evolution reaction

作者: Yu, P (Yu, Peng); Wang, FM (Wang, Fengmei); Shifa, TA (Shifa, Tofik Ahmed); Zhan, XY (Zhan, Xueying); Lou, XD (Lou, Xiaoding); Xia, F (Xia, Fan); He, J (He, Jun)

来源出版物: NANO ENERGY 卷: 58 页: 244-276 DOI: 10.1016/j.nanoen.2019.01.017 出版年: APR 2019

Web of Science 核心合集中的 "被引频次": 60

被引频次合计: 61

摘要: The depletion of the unsustainable fossil fuels drives the exploration of renewable and clean energy. Hydrogen gas, as the potential alternative for the future energy supply, is now considered as the primary choice. Recently, with the assistance of the non-noble metal based compounds, electrocatalytic hydrogen evolution has aroused tremendous attention. In particular, earth abundant materials beyond transition metal dichalcogenides, such as transition metal phosphides, carbides, nitrides, demonstrate highly active and efficient activity toward hydrogen evolution reaction (HER) under different conditions. In this review, focused on these materials, we systemically discuss their recent development in electrocatalytic hydrogen generation. The synthesis routes utilized to prepare superior and specific catalyst are highlighted. Then, we provide insight into the characterization and electrochemical performance of these materials as HER electrocatalysts. In the end, the challenges of these materials, important issues about studying eletablctrocatalysts and future perspectives are stressed.

入藏号: WOS:000461433600030

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied

ISSN: 2211-2855

eISSN: 2211-3282

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 86 条，共 381 条

标题: Trade-offs in land-use competition and sustainable land development in the North China Plain

作者: Jin, G (Jin, Gui); Chen, K (Chen, Kun); Wang, P (Wang, Pei); Guo, BS (Guo, Baishu); Dong, Y (Dong, Yin); Yang, J (Yang, Jun)

来源出版物: TECHNOLOGICAL FORECASTING AND SOCIAL CHANGE 卷: 141 页: 36-46 DOI: 10.1016/j.techfore.2019.01.004 出版年: APR 2019

Web of Science 核心合集中的 "被引频次": 42

被引频次合计: 42

摘要: Using the Computable General Equilibrium of Land Use Change (CGELUC) and Dynamics of Land System (DLS) models, we simulated land-use structures and patterns in Shandong Province in 2025 under three scenarios: baseline, resource consumption, and green development. Compared with the situation in 2015, a slight decrease in grassland, cultivated, and unused land was evident under the green development scenario. Forest land cover remained basically unchanged, whereas water bodies and construction land increased slightly. Under the baseline and resource consumption scenarios, all of the above land-use types showed a decreasing trend apart from construction land, which rapidly increased. Changes in the land-use allocation pattern demonstrated overall consistency and local differences under these scenarios. Among them, most changes in construction and cultivated land occurred around cities, with changes in forests and grassland mainly distributed in the central and northeastern regions. Changes in water bodies and unused land mainly occurred in the northern Yellow River basin and in northeastern coastal areas. Local differences were evident under the green development scenario, with conversion of a small amount of cultivated land in the central region into forests and grassland, and transformation of a small area of cultivated land in the northeastern coastal area into water bodies. The study's findings provide a scientific projection of competitive land-use relations in Shandong Province over the next decade under different land expropriation price and regulation scenarios, which can guide policy formulation and the selection of pathways for achieving sustainable regional development.

入藏号: WOS:000460990700004

出版商: ELSEVIER SCIENCE INC

出版商地址: STE 800, 230 PARK AVE, NEW YORK, NY 10169 USA

Web of Science 类别: Business; Regional & Urban Planning

ISSN: 0040-1625

eISSN: 1873-5509

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 87 条，共 381 条

标题: Mercury in marine Ordovician/Silurian boundary sections of South China is sulfide-hosted and non-volcanic in origin

作者: Shen, J (Shen, Jun); Algeo, TJ (Algeo, Thomas J.); Chen, JB (Chen, Jiubin); Planavsky, NJ (Planavsky, Noah J.); Feng, QL (Feng, Qinglai); Yu, JX (Yu, Jianxin); Liu, JL (Liu, Jinling)

来源出版物: EARTH AND PLANETARY SCIENCE LETTERS 卷: 511 页: 130-140 DOI: 10.1016/j.epsl.2019.01.028 出版年: APR 1 2019

Web of Science 核心合集中的 "被引频次": 38

被引频次合计: 38

摘要: Mercury (Hg) enrichment in stratigraphic successions is now widely used as a proxy for volcanic inputs, often for the purpose of documenting a relationship between large igneous province (LIP) magmatism and ecosystem perturbations. Earlier studies of Hg in Ordovician/Silurian boundary (OSB) sections in South China and Laurentia identified transient spikes in Hg/TOC ratios, on the basis of which a link between volcanism and the Late Ordovician mass extinction (LOME) was claimed. However, Hg enrichments must be tested based on normalization to their main host phase, and Hg/TOC is a suitable proxy only if Hg is mainly complexed by organic matter in the sediment. Here, we demonstrate that Hg in three OSB sections in South China (Qjliao, Yanzhi, and Jiaoye) is overwhelmingly associated with pyrite, as shown by r((Hg-TS)) > 0.9 (versus r((Hg-TOC)) < 0.1) and by EDS elemental mapping. This association requires that Hg concentrations be normalized to pyrite content as proxied by total sulfur [TS], rather than to total organic carbon [TOC]. The resulting Hg/TS profiles show no significant enrichments at any level within the Upper Ordovician-lower Silurian of the study sections. Also, mercury isotope data show constant mass-independent fractionation (Delta Hg-199) values (+0.11 +/- 0.03 parts per thousand) that are inconsistent with volcanic inputs. We therefore infer that previous reports of Hg enrichments in OSB sections were due to the presence of Hg-rich sulfides, and that Hg data from both the present and earlier studies provide no evidence of any volcanic influences on the LOME. The results of the present study highlight the need for caution in applying the Hg proxy for volcanic inputs and the importance of evaluating the main host phase of Hg in paleo-marine sediments. (C) 2019 Elsevier B.V. All rights reserved.

入藏号: WOS:000459839000013

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0012-821X

eISSN: 1385-013X

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 88 条，共 381 条

标题: Human health risks of heavy metals in paddy rice based on transfer characteristics of heavy metals from soil to rice

作者: Mao, CP (Mao, Changping); Song, YX (Song, Yinxian); Chen, LX (Chen, Lingxiao); Ji, JF (Ji, Junfeng); Li, JZ (Li, Jizhou); Yuan, XY (Yuan, Xuyin); Yang, ZF (Yang, Zhongfang); Ayoko, GA (Ayoko, Godwin A.); Frost, RL (Frost, Ray L.); Theiss, F (Theiss, Frederick)

来源出版物: CATENA 卷: 175 页: 339-348 DOI: 10.1016/j.catena.2018.12.029 出版年: APR 2019

Web of Science 核心合集中的 "被引频次": 40

被引频次合计: 44

摘要: In order to investigate the transfer and accumulation pathways of heavy metals in cropland ecosystems, an investigation of the geochemical behaviors of heavy metals in soil and rice plants was carried out in the Yangtze River Delta. Soil is one of the biggest reservoirs of heavy metals and affects food safety at the beginning of the food chain. The results of this study demonstrate that heavy metal levels in soil decreased with increasing soil pH, while rice shoots accumulated heavy metals more readily under low soil pH conditions. The non-carcinogenic hazard quotients (HQ) of heavy metals show that health risks for humans were primarily due to Pb and As. Furthermore, cancer risk (Risk) results suggested that similar to 76% and similar to 15.7% of cancer risk was caused by Cd and As levels, respectively. Decreasing soil pH enhanced the non-carcinogenic and carcinogenic health risks for the human body. Through exponential change between transfer factor (TFgrain/soll) and soil metals, HQ, a direct monitoring method for rice plants, was built using regression curves. It is proposed that besides condition of soil with high heavy metal concentration, for rice grown with surface soil metals, the safety of the rice product should be monitored when soil metals are under the following levels after harvest: non-carcinogenic risk, As < 20 mg/kg, Pb < 100 mg/kg, Cd < 0.07-0.68 mg/kg and Cu 7.56-30.87 mg/kg; and cancer risk, As < 20 mg/kg, Cd < 4 mg/kg and Cr < 200 mg/kg.

入藏号: WOS:000459358500031

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary; Soil Science; Water Resources

ISSN: 0341-8162

eISSN: 1872-6887

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 89 条，共 381 条

标题: Smart mobility control agent for enhanced oil recovery during CO2 flooding in ultra-low permeability reservoirs

作者: Zhang, Y (Zhang, Yan); Gao, MW (Gao, Mingwei); You, Q (You, Qing); Fan, HF (Fan, Hongfu); Li, WH (Li, Wenhui); Liu, YF (Liu, Yifei); Fang, JC (Fang, Jichao); Zhao, G (Zhao, Guang); Jin, ZH (Jin, Zhehui); Dai, CL (Dai, Caili)

来源出版物: FUEL 卷: 241 页: 442-450 DOI: 10.1016/j.fuel.2018.12.069 出版年: APR 1 2019

Web of Science 核心合集中的 "被引频次": 40

被引频次合计: 40

摘要: The development of natural/artificial fractures leads to significant differences of the physical properties between the matrix and the fractures, which usually causes serious channeling and low sweep efficiency during CO2 flooding in ultra-low permeability reservoirs, the use of a CO2-responsive smart mobility control system to generate bulk gel by wormlike micelles (WLMs) to mitigate gas channeling has great potentials for enhanced oil recovery (EOR) in ultra-low permeability reservoirs. In this study, five kinds of chemicals with CO2-sensitive groups are screened to measure the apparent viscosity using a rheometer. The experimental results show that the optimum system consists of 4.4 wt% N, N-dimethyl octylamide-propyl tertiary amine (DOAPA) and 2.0 wt% sodium p-toluenesulfonate (SPTS). Subsequently, the plugging capacity and EOR performance of the system are systematically evaluated using core flooding experiments. The optimized system (DOAPA/SPTS) exhibits outstanding plugging capacity for gas channeling with a plugging efficiency of 99.2%. The oil recovery of the CO2 flooding increases by 20.0%. In addition, the thickening mechanism of the CO2-responsive system is studied using rheological experiments and a cryogenic transmission electron microscopy (Cryo-TEM). The shear-thinning behavior demonstrates that the thickening effect of the high-viscosity WLMs is strong in the DOAPA/SPTS-CO2 solution, and the Cryo-TEM results indicate a transition from spherical micelles to the WLMs. The protonation contributes to the formation of the WLMs in the solution during phase transformation process. The results of this study are expected to provide benchmark to select the mobility control agent for CO2 flooding in ultra-low permeability reservoirs.

入藏号: WOS:000458760500043

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0016-2361

eISSN: 1873-7153

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 90 条，共 381 条

标题: Mechanisms of shale gas adsorption: Evidence from thermodynamics and kinetics study of methane adsorption on shale

作者: Chen, L (Chen, Lei); Zuo, L (Zuo, Luo); Jiang, ZX (Jiang, Zhenxue); Jiang, S (Jiang, Shu); Liu, KY (Liu, Keyu); Tang, JQ (Tang, Jingqiang); Zhang, LC (Zhang, Luchuan)

来源出版物: CHEMICAL ENGINEERING JOURNAL 卷: 361 页: 559-570 DOI: 10.1016/j.cej.2018.11.185 出版年: APR 1 2019

Web of Science 核心合集中的 "被引频次": 49

被引频次合计: 49

摘要: Studies on the mechanisms of shale gas adsorption are of great significance for shale gas accumulation and reserves evaluation. In order to investigate the mechanisms of shale gas adsorption from the perspective of methane adsorption thermodynamics and kinetics, high-pressure methane adsorption and adsorption kinetics experiments were measured at 40.6 degrees C, 60.6 degrees C, 75.6 degrees C and 95.6 degrees C at pressures up to 52 MPa for the Lower Silurian Longmaxi shale sample collected from the Southern Sichuan Basin, China. The adsorption isotherms and kinetics curves of methane were obtained and a detailed analysis was performed. The results indicate that (1) Under the condition of 0-52 MPa, the absolute adsorption isotherm of methane on shale has the characteristics of type I adsorption isotherm. Temperature has an important effect on the maximum excess and absolute adsorption of methane. At the same temperature, the absolute adsorption amount of methane on shale increases slower at a higher pressure, which suggests that the methane adsorption rate decreases at a higher pressure. (2) The average isosteric heat of adsorption of methane on shale is 21.06 kJ/mol, indicating that the dominant adsorption process of methane on shale may be physical adsorption. The isosteric heat of adsorption increases with increasing absolute methane adsorption amount, indicating that the adsorption heat is mainly affected by the interaction between the adsorbed methane molecules. (3) Bangham kinetic model can be used to describe the dynamic adsorption process of methane on shale. Higher temperature and pressure lead to a lower Bangham adsorption rate constant, which makes it more difficult to adsorb methane molecules for shale. This is consistent with the conclusion drawn from the thermodynamics study of absolute adsorption isotherms of methane on shale.

入藏号: WOS:000457096400056

出版商: ELSEVIER SCIENCE SA

出版商地址: PO BOX 564, 1001 LAUSANNE, SWITZERLAND

Web of Science 类别: Engineering, Environmental; Engineering, Chemical

ISSN: 1385-8947

eISSN: 1873-3212

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 91 条，共 381 条

标题: Design of robust MPPT controller for grid-connected PMSG-Based wind turbine via perturbation observation based nonlinear adaptive control

作者: Chen, J (Chen, Jian); Yao, W (Yao, Wei); Zhang, CK (Zhang, Chuan-Ke); Ren, YX (Ren, Yaxing); Jiang, L (Jiang, Lin)

来源出版物: RENEWABLE ENERGY 卷: 134 页: 478-495 DOI: 10.1016/j.renene.2018.11.048 出版年: APR 2019

Web of Science 核心合集中的 "被引频次": 42

被引频次合计: 42

摘要: This paper presents a robust maximum power point tracking (MPPT) control scheme for a grid connected permanent magnet synchronous generator based wind turbine (PMSG-WT) using perturbation observation based nonlinear adaptive control. In the proposed control scheme, system nonlinearities, parameter uncertainties, and external disturbances of the PMSG-WT are represented as a lumped perturbation term, which is estimated by a high-gain perturbation observer. The estimate of the lumped perturbation is employed to compensate the actual perturbation and further achieve adaptive feedback linearizing control of the original nonlinear system, without requiring the detailed system model and full state measurements. The effectiveness of the proposed control scheme is verified through both simulation studies and experimental tests. The results show that, compared with the conventional vector controller and the standard feedback linearizing controller, the proposed control strategy provides higher power conversion efficiency and has better dynamic performances and robustness against parameter uncertainties and external disturbances. (C) 2018 Elsevier Ltd. All rights reserved.

入藏号: WOS:000456760900045

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Green & Sustainable Science & Technology; Energy & Fuels

ISSN: 0960-1481

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 92 条，共 381 条

标题: Synergistic integration of Bi metal and phosphate defects on hexagonal and monoclinic BiPO4: Enhanced photocatalysis and reaction mechanism

作者: Li, JR (Li, Jiarui); Zhang, WD (Zhang, Wendong); Ran, MX (Ran, Maoxi); Sun, YJ (Sun, Yanjuan); Huang, HW (Huang, Hongwei); Dong, F (Dong, Fan)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 243 页: 313-321 DOI: 10.1016/j.apcatb.2018.10.055 出版年: APR 2019

Web of Science 核心合集中的 "被引频次": 72

被引频次合计: 72

摘要: Bi metal deposited hexagonal BiPO4 with the exposure of {102} facet (Bi-HBPO-102) and Bi metal deposited monoclinic BiPO4 with the exposure of {120} facet (Bi-MBPO-120) were prepared by chemical deposition method and solvothermal approach, respectively. The as-prepared catalysts presented more efficient photo catalytic activity of NO removal than pure BiPO4 (2.0% for BiPO4, 51.4% for Bi-HBPO-102 and 36.2% for Bi-MBPO-120) under visible light irradiation, which can be attributed to the synergistic effects endowed by the phosphate defect, the surface plasmon resonance (SPR) effect of Bi metal and the facet effect. The existence of phosphate defect was confirmed by the XPS and solid state EPR technique. The DFT calculation revealed the position of phosphate and the phosphate defect induced the formation of an intermediate level within the forbidden band to allow efficient charge transfer from valence band to conduction band. Moreover, the Bi metal would act as the electron contributor and electron conductor which facilitated the charge carriers separation. Therefore, a new charge transfer pathway can be certified on account of the fact that the covalent loop was evidently generated both at the interface and along with the path of [Bi2O2](2+) -> Bi metal -> PO43- on the Bi@BiPO4. More importantly, the Bi-HBPO-102 with exposure of {102} facet exhibited higher photocatalytic activity than the Bi-MBPO-120 with exposed {120} facet. The {102} facet with the stronger distorted PO4 tetrahedron and the lower potential energy barrier (-17.5eV) contributed to the contacted interface with the more efficient charge transfer, which promoted the generation of active radicals on {102} facet. Additionally, for Bi-HBPO-102, the reaction intermediate NO+ can be observed with in situ DRIFTS, which facilitated the activation of NO via the formation of NO+ to promote the oxidation of NOx into final products. Herein, a new strategy for tailoring the charge transfer pathway was developed to enhance the photocatalytic performance and a new photocatalytic reaction mechanism for photocatalytic NOx removal was proposed. This work could provide new insights into the modification of photocatalysts and mechanistic understanding of the gas-phase photocatalytic reaction mechanism.

入藏号: WOS:000453616800033

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 93 条，共 381 条

标题: Improved population mapping for China using remotely sensed and points-of-interest data within a random forests model

作者: Ye, TT (Ye, Tingting); Zhao, NZ (Zhao, Naizhuo); Yang, XC (Yang, Xuchao); Ouyang, ZT (Ouyang, Zutao); Liu, XP (Liu, Xiaoping); Chen, Q (Chen, Qian); Hu, KJ (Hu, Kejia); Yue, WZ (Yue, Wenze); Qi, JG (Qi, Jiaguo); Li, ZS (Li, Zhansheng); Jia, P (Jia, Peng)

来源出版物: SCIENCE OF THE TOTAL ENVIRONMENT 卷: 658 页: 936-946 DOI: 10.1016/j.scitotenv.2018.12.276 出版年: MAR 25 2019

Web of Science 核心合集中的 "被引频次": 43

被引频次合计: 45

摘要: Remote sensing image products (e.g. brightness of nighttime lights and land cover/land use types) have been widely used to disaggregate census data to produce griciclecl population maps for large geographic areas. The advent of the geospatial big data revolution has created additional opportunities to map population distributions at fine resolutions with high accuracy. A considerable proportion of the geospatial data contains semantic information that indicates different categories of human activities occurring at exact geographic locations. Such information is often lacking in remote sensing data. In addition, the remarkable progress in machine learning provides toolkits for demographers to model complex nonlinear correlations between population and heterogeneous geographic covariates. In this study, a typical type of geospatial big data, points-of-interest (POls), was combined with multi source remote sensing data in a random forests model to disaggregate the 2010 county-level census population data to 100 x 100 m grids. Compared with the WorldPop population dataset, our population map showed higher accuracy. The root mean square error for population estimates in Beijing, Shanghai, Guangzhou, and Chongqing for this method and WorldPop were 27,829 and 34,193, respectively. The large under-allocation of the population in urban areas and over-allocation in rural areas in the WorldPop dataset was greatly reduced in this new population map. Apart from revealing the effectiveness of POls in improving population mapping, this study promises the potential of geospatial big data for mapping other socioeconomic parameters in the future. (C) 2018 Elsevier B.V. All rights reserved.

入藏号: WOS:000456175700090

PubMed ID: 30583188

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Environmental Sciences

ISSN: 0048-9697

eISSN: 1879-1026

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 94 条，共 381 条

标题: Three-in-One Oxygen Vacancies: Whole Visible-Spectrum Absorption, Efficient Charge Separation, and Surface Site Activation for Robust CO2 Photoreduction

作者: Yu, HJ (Yu, Hongjian); Li, JY (Li, Jieyuan); Zhang, YH (Zhang, Yihe); Yang, SQ (Yang, Songqiu); Han, KL (Han, Keli); Dong, F (Dong, Fan); Ma, TY (Ma, Tianyi); Huang, HW (Huang, Hongwei)

来源出版物: ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 卷: 58 期: 12 页: 3880-3884 DOI: 10.1002/anie.201813967 出版年: MAR 18 2019

Web of Science 核心合集中的 "被引频次": 162

被引频次合计: 162

摘要: A facile and controllable in situ reduction strategy is used to create surface oxygen vacancies (OVs) on Aurivillius-phase Sr2Bi2Nb2TiO12 nanosheets, which were prepared by a mineralizer-assisted soft-chemical method. Introduction of OVs on the surface of Sr2Bi2Nb2TiO12 extends photoresponse to cover the whole visible region and also tremendously promotes separation of photoinduced charge carriers. Adsorption and activation of CO2 molecules on the surface of the catalyst are greatly enhanced. In the gas-solid reaction system without co-catalysts or sacrificial agents, OVs-abundant Sr2Bi2Nb2TiO12 nanosheets show outstanding CO2 photoreduction activity, producing CO with a rate of 17.11 mu mol g(-1) h(-1), about 58 Limes higher than that of the bulk counterpart, surpassing most previously reported state-of-the-art photocatalysts. Our study provides a three-in-one integrated solution to advance the performance of photocatalysts for solar-energy conversion and generation of renewable energy.

入藏号: WOS:000462680700034

PubMed ID: 30600588

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary

ISSN: 1433-7851

eISSN: 1521-3773

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 95 条，共 381 条

标题: A Practical Privacy-Preserving Data Aggregation (3PDA) Scheme for Smart Grid

作者: Liu, YN (Liu, Yining); Guo, W (Guo, Wei); Fan, CI (Fan, Chun-I); Chang, L (Chang, Liang); Cheng, C (Cheng, Chi)

来源出版物: IEEE TRANSACTIONS ON INDUSTRIAL INFORMATICS 卷: 15 期: 3 页: 1767-1774 DOI: 10.1109/TII.2018.2809672 出版年: MAR 2019

Web of Science 核心合集中的 "被引频次": 49

被引频次合计: 50

摘要: The real-time electricity consumption data can be used in value-added service such as big data analysis, meanwhile the single user's privacy needs to be protected. How to balance the data utility and the privacy preservation is a vital issue, where the privacy-preserving data aggregation could be a feasible solution. Most of the existing data aggregation schemes rely on a trusted third party (TTP). However, this assumption will have negative impact on reliability, because the system can be easily knocked down by the denial of service attack. In this paper, a practical privacy-preserving data aggregation scheme is proposed without TTP, in which the users with some extent trust construct a virtual aggregation area to mask the single user's data, and meanwhile, the aggregation result almost has no effect for the data utility in large scale applications. The computation cost and communication overhead are reduced in order to promote the practicability. Moreover, the security analysis and the performance evaluation show that the proposed scheme is robust and efficient.

入藏号: WOS:000460580100050

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Automation & Control Systems; Computer Science, Interdisciplinary Applications; Engineering, Industrial

ISSN: 1551-3203

eISSN: 1941-0050

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 96 条，共 381 条

标题: Microbial Community Responses to Vanadium Distributions in Mining Geological Environments and Bioremediation Assessment

作者: Zhang, BG (Zhang, Baogang); Wang, S (Wang, Song); Diao, MH (Diao, Muhe); Fu, J (Fu, Jie); Xie, MM (Xie, Miaomiao); Shi, JX (Shi, Jiaxin); Liu, ZQ (Liu, Ziqi); Jiang, YF (Jiang, Yufeng); Cao, XL (Cao, Xuelong); Borthwick, AGL (Borthwick, Alistair G. L.)

来源出版物: JOURNAL OF GEOPHYSICAL RESEARCH-BIOGEOSCIENCES 卷: 124 期: 3 页: 601-615 DOI: 10.1029/2018JG004670 出版年: MAR 2019

Web of Science 核心合集中的 "被引频次": 52

被引频次合计: 53

摘要: Vanadium mining activities can cause contamination of the surrounding geological environment. Vanadium may exist in multiple matrices due to its migration and transformation, forming interactive relationships; however, the connection between vanadium distributions in multiple matrices and microbial community responses remains largely unknown. Vanadium is a redox-sensitive metal that can be microbiologically reduced and immobilized. To date, bioremediation of vanadium-contaminated environments by indigenous microorganisms has rarely been evaluated. This paper reports a systematic investigation into vanadium distributions and microbial communities in soils, water, and sediment from Panzhihua, China. Large vanadium contents of 1130.19.8mg/kg and 0.130.02mg/L were found in surface soil and groundwater. Vanadium in surface water tended to precipitate. Microbial communities isolated from similar environments were alike due to similarity in matrix chemistry whereas communities were distinct when compared to different matrices, with lower richness and diversity in groundwater. Proteobacteria was distributed widely and dominated microbial communities within groundwater. Redundancy analysis shows that vanadium and nutrients significantly affected metal-tolerant bacteria. Long-term cultivation (240days) suggests the possibility of vanadium bioremediation by indigenous microorganisms, within acid-soluble fraction. This active fraction can potentially release mobile vanadium with shifted redox conditions. Vanadium (V) was bio-reduced to less toxic, mobile vanadium (IV) primarily by enriched Bacillus and Thauera. This study reveals the biogeochemical fate of vanadium in regional geological environments and suggests a bioremediation pathway via native vanadium-reducing microbes.

入藏号: WOS:000464653200011

出版商: AMER GEOPHYSICAL UNION

出版商地址: 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Web of Science 类别: Environmental Sciences; Geosciences, Multidisciplinary

ISSN: 2169-8953

eISSN: 2169-8961

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 97 条，共 381 条

标题: Mesopore-Induced Ultrafast Na+-Storage in T-Nb2O5/Carbon Nanofiber Films toward Flexible High-Power Na-Ion Capacitors

作者: Li, YZ (Li, Yuzhu); Wang, HW (Wang, Huanwen); Wang, LB (Wang, Libin); Mao, ZF (Mao, Zhifei); Wang, R (Wang, Rui); He, BB (He, Beibei); Gong, YS (Gong, Yansheng); Hu, XL (Hu, Xianluo)

来源出版物: SMALL 卷: 15 期: 9 文献号: 1804539 DOI: 10.1002/smll.201804539 出版年: MAR 1 2019

Web of Science 核心合集中的 "被引频次": 62

被引频次合计: 63

摘要: Hybrid Na-ion capacitors (NICs) are receiving considerable interest because they combine the merits of both batteries and supercapacitors and because of the low-cost of sodium resources. However, further large-scale deployment of NICs is impeded by the sluggish diffusion of Na+ in the anode. To achieve rapid redox kinetics, herein the controlled fabrication of mesoporous orthorhombic-Nb2O5 (T-Nb2O5)/carbon nanofiber (CNF) networks is demonstrated via in situ SiO2-etching. The as-obtained mesoporous T-Nb2O5 (m-Nb2O5)/CNF membranes are mechanically flexible without using any additives, binders, or current collectors. The in situ formed mesopores can efficiently increase Na+-storage performances of the m-Nb2O5/CNF electrode, such as excellent rate capability (up to 150 C) and outstanding cyclability (94% retention after 10 000 cycles at 100 C). A flexible NIC device based on the m-Nb2O5/CNF anode and the graphene framework (GF)/mesoporous carbon nanofiber (mCNF) cathode, is further constructed, and delivers an ultrahigh power density of 60 kW kg(-1) at 55 Wh kg(-1) (based on the total weight of m-Nb2O5/CNF and GF/mCNF). More importantly, owing to the free-standing flexible electrode configuration, the m-Nb2O5/CNF//GF/mCNF NIC exhibits high volumetric energy and power densities (11.2 mWh cm(-3), 5.4 W cm(-3)) based on the full device, which holds great promise in a wide variety of flexible electronics.

入藏号: WOS:000460676900002

PubMed ID: 30701686

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary; Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied; Physics, Condensed Matter

ISSN: 1613-6810

eISSN: 1613-6829

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 98 条，共 381 条

标题: Effect of Chinese policies on rare earth supply chain resilience

作者: Mancheri, NA (Mancheri, Nabeel A.); Sprecher, B (Sprecher, Benjamin); Bailey, G (Bailey, Gwendolyn); Ge, JP (Ge, Jianping); Tukker, A (Tukker, Arnold)

来源出版物: RESOURCES CONSERVATION AND RECYCLING 卷: 142 页: 101-112 DOI: 10.1016/j.resconrec.2018.11.017 出版年: MAR 2019

Web of Science 核心合集中的 "被引频次": 40

被引频次合计: 43

摘要: Rare earths elements (REE) are considered as strategic resources because they interact with business and governments' direct policy interventions. Policy interventions can have a major effect on security of rare earth supply (Kooroshy et al., 2015). The purpose of this study is to scrutinize China's REE policies and its impacts on the supply chain resilience. We analyze the supply chain dynamics by specifically targeting a number of Chinese REE policies that have disruptive tendencies. We analyze various policies placing the price at the center as an overarching feedback loop. In other words, we focus on how price responds to various resilience influencing mechanisms such as diversity of supply, regulatory frameworks, and stockpiling. In the process, we investigate Chinese influence on rest of the world (RoW) supply chain and dynamics inside the Chinese supply chain as there are two different layers of supply chain one for China and another one for rest of the world. We show that the supply chain is a complex phenomenon and resilience of a system is not solely dependent on physical disruptions but also on dynamic factors such as societal and geo-political (eg. environmental regulation, speculative market and export ban). We identify links and interdependencies even where data is not readily available and examine how the overall system reacts to various constraints and disruptions.

入藏号: WOS:000457659400011

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Environmental; Environmental Sciences

ISSN: 0921-3449

eISSN: 1879-0658

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 99 条，共 381 条

标题: Experimental study on lateral flooding for enhanced oil recovery in bottom-water reservoir with high water cut

作者: You, Q (You, Qing); Wen, QY (Wen, Quanyi); Fang, JC (Fang, Jichao); Guo, M (Guo, Min); Zhang, QS (Zhang, Qingsheng); Dai, CL (Dai, Caili)

来源出版物: JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING 卷: 174 页: 747-756 DOI: 10.1016/j.petrol.2018.11.053 出版年: MAR 2019

Web of Science 核心合集中的 "被引频次": 42

被引频次合计: 42

摘要: The regular enhanced oil recovery (EOR) methods in bottom-water reservoir aim to increase the vertical sweep efficiency. After multicycle chemical injection, the injected slug cannot effectively control the bottom water coning in the presence of fully developed water channel, decreasing the sweep efficiency and lowering economic efficiency. To improve the development effect of bottom-water reservoir, lateral flooding is proposed as a more cost-effective EOR technique by displacing the oil formation horizontally. In this study, three lateral flooding tests were performed in a three-dimensional physical model based on the geometric similarity criterion. Bottom-water reservoirs were simulated by sandpacking oil and water formations according to the parameters of the target oil reservoir. The bottom-water energy was supplied by an ISCO constant pressure, and the lateral flooding was conducted by an ISCO constant rate pumps. The oil recovery, water cut, pressure drop, and saturation variation maps obtained from these tests were recorded and analyzed. A comparison of these results between different crosslinked polymer slug tests shows that the improved oil recovery by lateral waterflooding can be mainly attributed to a significant increase in horizontal sweep efficiency. After 0.3 PV crosslinked polymer injection, about two-thirds of that was used to shut off the main water channels; the chemical packer, formed by the surplus polymer spreading along the oil/water interface under the drive of lateral injection, can inhibit bottom water from coning into the oil formation and prevent the crossflow. The 0.2, 0.3, and 0.4 PV crosslinked polymer injection can increase oil recovery by as much as 11.35, 36.23, and 39.74% of the original oil-in-place (OOIP), respectively. This confirms that lateral flooding is an efficient EOR method in bottom-water reservoir.

入藏号: WOS:000456963200064

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Energy & Fuels; Engineering, Petroleum

ISSN: 0920-4105

eISSN: 1873-4715

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 100 条，共 381 条

标题: Promoted peroxymonosulfate activation into singlet oxygen over perovskite for ofloxacin degradation by controlling the oxygen defect concentration

作者: Gao, PP (Gao, Panpan); Tian, XK (Tian, Xike); Nie, YL (Nie, Yulun); Yang, C (Yang, Chao); Zhou, ZX (Zhou, Zhaoxin); Wang, YX (Wang, Yanxin)

来源出版物: CHEMICAL ENGINEERING JOURNAL 卷: 359 页: 828-839 DOI: 10.1016/j.cej.2018.11.184 出版年: MAR 1 2019

Web of Science 核心合集中的 "被引频次": 35

被引频次合计: 36

摘要: Recently, perovskite is becoming a promising alternative as peroxymonosulfate (PMS) activator for the remediation of organic pollutants in water. But the factor determining PMS activation efficiency of perovskite and the evolution of reactive oxygen species (ROS) remain equivocal and elusive. In this study, we proposed an oxygen defect dependent PMS activation mechanism over perovskite with the singlet oxygen (O-1(2)) as the dominant ROS. Among the tested four perovskites, ofloxacin (OFX) degradation efficiency increased with the following order: LaFeO3 < LaZnO3 < LaMnO3 < LaNiO3, which agreed well with their oxygen defect amounts based on X-ray photoelectron spectroscopy (XPS) and electron paramagnetic resonance (EPR) analysis. The results clearly demonstrated a good relationship among oxygen defects in LaBO3, OFX degradation efficiency and O-1(2) concentration. Moreover, O-1(2) evolution mechanism over perovskite by decreasing the activation energy of PMS self-decomposition was proposed. The O-1(2) mediated OFX degradation pathway was further studied by HPLC-MS technique and three-dimensional excitation-emission matrix fluorescence spectroscopy (3D EEMs). This work provides a new insight into PMS activation by perovskites and favors its application in actual water treatment.

入藏号: WOS:000454137400081

出版商: ELSEVIER SCIENCE SA

出版商地址: PO BOX 564, 1001 LAUSANNE, SWITZERLAND

Web of Science 类别: Engineering, Environmental; Engineering, Chemical

ISSN: 1385-8947

eISSN: 1873-3212

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 101 条，共 381 条

标题: Greening in Rural Areas Increases the Surface Urban Heat Island Intensity

作者: Yao, R (Yao, Rui); Wang, LC (Wang, Lunche); Huang, X (Huang, Xin); Gong, W (Gong, Wei); Xia, XG (Xia, Xiangao)

来源出版物: GEOPHYSICAL RESEARCH LETTERS 卷: 46 期: 4 页: 2204-2212 DOI: 10.1029/2018GL081816 出版年: FEB 28 2019

Web of Science 核心合集中的 "被引频次": 35

被引频次合计: 35

摘要: In this study, Moderate Resolution Imaging Spectroradiometer land cover, land surface temperature (LST), and enhanced vegetation index (EVI) data were used to investigate the trends of surface urban heat island intensity (SUHII, urban LST minus rural LST) and their relations with vegetation in 397 global big cities during 2001-2017. Major findings include the following: (1) Annual daytime and nighttime SUHII increased significantly (p < 0.05, Mann-Kendall trend test) in 42.1% and 30.5% cities, respectively. (2) The daytime SUHII in the growing season was significantly and positively correlated with rural EVI in 58.9% cities. This is because high rural EVI can increase the EVI difference between urban and rural areas. (3) Rural greening contributed 22.5% of the increased daytime SUHII in the growing season at the global scale. This study highlights that the effect of greening in rural areas was a significant and widespread driver for the increased daytime SUHII.

Plain Language Summary Surface urban heat island (SUHI) refers to higher land surface temperature (LST) in urban than in rural areas. The increased SUHI intensity (urban LST minus rural) was mainly attributed to increased anthropogenic heat emission and built-up areas and reductions in vegetation in urban areas in the literature. However, this study showed that the increased vegetation (i.e., greening) in rural areas was a significant and widespread driver for the increased daytime SUHI intensity around the world during 2001-2017. The implication of this study is that urban LST may increase much faster than rural LST in future global warming.

入藏号: WOS:000461855600034

出版商: AMER GEOPHYSICAL UNION

出版商地址: 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0094-8276

eISSN: 1944-8007

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 102 条，共 381 条

标题: The influence of cerium dioxide functionalized reduced graphene oxide on reducing fire hazards of thermoplastic polyurethane nanocomposites

作者: Wang, SG (Wang, Shuguang); Gao, R (Gao, Rui); Zhou, KQ (Zhou, Keqing)

来源出版物: JOURNAL OF COLLOID AND INTERFACE SCIENCE 卷: 536 页: 127-134 DOI: 10.1016/j.jcis.2018.10.052 出版年: FEB 15 2019

Web of Science 核心合集中的 "被引频次": 43

被引频次合计: 45

摘要: In this work, CeO2/rGO hybrids were successfully synthesized by a facile one-step hydrothermal method to reduce fire hazards of thermoplastic polyurethane. The structure, element components and morphology of the synthesized products were characterized by XRD, FTIR, Raman spectra and TEM. Then, 2.0 wt% CeO2/rGO hybrids were incorporated into thermoplastic polyurethane matrix (TPU) to improve thermal stability, flame retardancy and smoke toxicity suppression. The introduction of CeO2/rGO hybrids could remarkably suppress heat release and smoke release, indicated by the reduction of the peak heat release rate, smoke produce rate, as well as the release rate of CO and CO2. The significant improvement in thermal stability and smoke suppression properties was mainly due to the synergistic function between physical barrier effect of rGO and catalytic effect of CeO2. This work provided an effect way to enhance the thermal stability and fire safety of TPU. (C) 2018 Elsevier Inc. All rights reserved.

入藏号: WOS:000452937800014

PubMed ID: 30366178

出版商: ACADEMIC PRESS INC ELSEVIER SCIENCE

出版商地址: 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA

Web of Science 类别: Chemistry, Physical

ISSN: 0021-9797

eISSN: 1095-7103

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 103 条，共 381 条

标题: Achieving Efficient Incorporation of pi-Electrons into Graphitic Carbon Nitride for Markedly Improved Hydrogen Generation

作者: Li, J (Li, Jing); Wu, DD (Wu, Dandan); Iocozzia, J (Iocozzia, James); Du, HW (Du, Haiwei); Liu, XQ (Liu, Xueqin); Yuan, YP (Yuan, Yupeng); Zhou, W (Zhou, Wei); Li, Z (Li, Zhen); Xue, ZM (Xue, Zhaoming); Lin, ZQ (Lin, Zhiqun)

来源出版物: ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 卷: 58 期: 7 页: 1985-1989 DOI: 10.1002/anie.201813117 出版年: FEB 11 2019

Web of Science 核心合集中的 "被引频次": 58

被引频次合计: 59

摘要: A rapid and highly efficient strategy for introducing C into g-C3N4 involves copolymerizing pi-electron-rich barbituric acid with melamine via a facile microwave-assisted heating, thereby eliminating the issues in conventional electric furnace heating, such as the severe volatilization, owing to the mismatch of the sublimation temperatures of barbituric acid and melamine. The g-C3N4 catalyst after optimizing the C-doping content actively generates increased amounts of H-2 under visible light exposure with the highest H-2 generation rate of 25.0 mu molh(-1), which is nearly 20 times above that using g-C3N4 produced by conventional electric furnace heating of two identical monomers (1.3 mu molh(-1)). As such, the microwave-assisted heating strategy may stand out as an extremely simple route to incorporating pi-electrons into g-C3N4 with markedly improved photocatalytic performance.

入藏号: WOS:000458828000017

PubMed ID: 30537155

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary

ISSN: 1433-7851

eISSN: 1521-3773

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 104 条，共 381 条

标题: Designing surface-enhanced Raman scattering (SERS) platforms beyond hotspot engineering: emerging opportunities in analyte manipulations and hybrid materials

作者: Lee, HK (Lee, Hiang Kwee); Lee, YH (Lee, Yih Hong); Koh, CSL (Koh, Charlynn Sher Lin); Gia, CPQ (Gia Chuong Phan-Quang); Han, XM (Han, Xuemei); Lay, CL (Lay, Chee Leng); Sim, HYF (Sim, Howard Yi Fan); Kao, YC (Kao, Ya-Chuan); An, Q (An, Qi); Ling, XY (Ling, Xing Yi)

来源出版物: CHEMICAL SOCIETY REVIEWS 卷: 48 期: 3 页: 731-756 DOI: 10.1039/c7cs00786h 出版年: FEB 4 2019

Web of Science 核心合集中的 "被引频次": 96

被引频次合计: 96

摘要: Surface-enhanced Raman scattering (SERS) is a molecule-specific spectroscopic technique with diverse applications in (bio) chemistry, clinical diagnosis and toxin sensing. While hotspot engineering has expedited SERS development, it is still challenging to detect molecules with no specific affinity to plasmonic surfaces. With the aim of improving detection performances, we venture beyond hotspot engineering in this tutorial review and focus on emerging material design strategies to capture and confine analytes near SERS-active surfaces as well as various promising hybrid SERS platforms. We outline five major approaches to enhance SERS performance: (1) enlarging Raman scattering cross-sections of non-resonant molecules via chemical coupling reactions; (2) targeted chemical capturing of analytes through surface-grafted agents to localize them on plasmonic surfaces; (3) physically confining liquid analytes on non-wetting SERS-active surfaces and (4) confining gaseous analytes using porous materials over SERS hotspots; (5) synergizing conventional metal-based SERS platforms with functional materials such as graphene, semiconducting materials, and piezoelectric polymers. These approaches can be integrated with engineered hotspots as a multifaceted strategy to further boost SERS sensitivities that are unachievable using hotspot engineering alone. Finally, we highlight current challenges in this research area and suggest new research directions towards efficient SERS designs critical for real-world applications.

入藏号: WOS:000457793900001

PubMed ID: 30475351

出版商: ROYAL SOC CHEMISTRY

出版商地址: THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS, ENGLAND

Web of Science 类别: Chemistry, Multidisciplinary

ISSN: 0306-0012

eISSN: 1460-4744

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 105 条，共 381 条

标题: Spatially Explicit Mapping of Soil Conservation Service in Monetary Units Due to Land Use/Cover Change for the Three Gorges Reservoir Area, China

作者: Li, SC (Li, Shicheng); Bing, ZL (Bing, Zilu); Jin, G (Jin, Gui)

来源出版物: REMOTE SENSING 卷: 11 期: 4 文献号: 468 DOI: 10.3390/rs11040468 出版年: FEB 2 2019

Web of Science 核心合集中的 "被引频次": 30

被引频次合计: 30

摘要: Studies of land use/cover change (LUCC) and its impact on ecosystem service (ES) in monetary units can provide information that governments can use to identify where protection and restoration is economically most important. Translating ES in monetary units into decision making strongly depends on the availability of spatially explicit information on LUCC and ES. Yet such datasets are unavailable for the Three Gorges Reservoir Area (TGRA) despite its perceived soil conservation service value (SCSV). The availability of remote sensing-based datasets and advanced GIS techniques has enhanced the potential of spatially explicit ES mapping exercises. Here, we first explored LUCC in the TGRA for four time periods (1995-2000, 2000-2005, 2005-2010, and 2010-2015). Then, applying a value transfer method with an equivalent value factor spatialized using the normalized difference vegetation index (NDVI), we estimated the changes of monetary SCSV in response to LUCC in a spatially explicit way. Finally, the sensitivity of SCSV changes in response to LUCC was determined. Major findings: (i) Expansion of construction land and water bodies and contraction of cropland characterized the LUCC in all periods. Their driving factors include the relocation of residents, construction of the Three Gorges Dam, urbanization, and the Grain for Green Program; (ii) The SCSV for TGRA was generally stable for 1995-2015, declining slightly (<1%), suggesting a sustainable human-environment relationship in the TGRA. The SCSV prevails in regions with elevations (slopes) of 400-1600 m (0 degrees-10 degrees); for Chongqing and its surrounding regions it decreased significantly during 1995-2015; (iii) SCSV's sensitivity index was 1.04, 0.53, 0.92, and 1.25 in the four periods, respectively, which is generally low. Chongqing and its surrounding regions, with their pervasive urbanization and dense populations, had the highest sensitivity. For 1995-2015, 70.63% of the study area underwent increases in this sensitivity index. Our results provide crucial information for policymaking concerning ecological conservation and compensation.

入藏号: WOS:000460766100098

出版商: MDPI

出版商地址: ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND

Web of Science 类别: Remote Sensing

eISSN: 2072-4292

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 106 条，共 381 条

标题: Organic-matter-rich shales of China

作者: Zou, CN (Zou, Caineng); Zhu, RK (Zhu, Rukai); Chen, ZQ (Chen, Zhong-Qiang); Ogg, JG (Ogg, James G.); Wu, ST (Wu, Songtao); Dong, DZ (Dong, Dazhong); Qiu, Z (Qiu, Zhen); Wang, YM (Wang, Yuman); Wang, L (Wang, Lan); Lin, SH (Lin, Senhu); Cui, JW (Cui, Jingwei); Su, L (Su, Ling); Yang, Z (Yang, Zhi)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 189 页: 51-78 DOI: 10.1016/j.earscirev.2018.12.002 出版年: FEB 2019

Web of Science 核心合集中的 "被引频次": 61

被引频次合计: 65

摘要: Organic-matter-rich shales are the main target rocks for unconventional oil and gas exploration and development across the world. In China, shale-gas geological resources are estimated as approximately 110 x 10(12) m(3), with recoverable gas reserves of ca. 20 x 10(12) m(3). Recoverable shale-oil reserves are estimated as ca. 5 x 10(9) t. A total 35 important organic-matter-rich shale units have been recognized from Mesoproterozoic to Cenozoic strata across the entire China. These shales are categorized according to their origin under marine, marine-nonmarine transitional and lacustrine conditions. Shales of marine origin, with ca. 9 x 10(12) m(3) recoverable resources, dominate China's potential in terms of total volume of organic-carbon. Currently, the most favorable marine shales for oil and gas exploration are found in the Sichuan Basin within the lower Cambrian Qiongzhusi Formation and in the Wufeng-Longmaxi formations of uppermost Ordovician through lower Silurian. A fortuitous combination of of sea-level variations, of paleo-productivity, of tectonic activity causing development and migration of partially closed deep basin depocenters, and of sediment accumulation rates controlled the extensive deposition and distribution of organic-matter-rich shales in these Wufeng and Longmaxi formations. Organic-matter-rich shales in marine-nonmarine transitional facies associated with coal measures occur in North China within the Carboniferous and Permian, and in South China within the Permian. These Carboniferous Permian organic-matter-rich shales are important source rocks for the gas fields in the Ordos and Sichuan Basins. Abundant organic-rich shales are also widely distributed within coal-bearing elastics and coal-measure shales of fluvial, lacustrine, and swamp facies in Upper Triassic to Middle Jurassic successions of many basins. Lacustrine organic-rich shales were deposited during the Permian through Neogene in various freshwater to saline lake settings. Lacustrine organic-matter-rich shales are the main oil source rocks in the Songliao, Bohai Bay, Ordos and Junggar basins. Lacustrine algae contributed to the rain of organic matter; and the preservation of organic matter and distribution of organic-rich shale was controlled by lake currents, water depth and oxygen-poor conditions, with enhanced preservation when buried by turbidity currents. Algal blooms were partly induced by trace nutrients from volcanic ash falls in all of these lacustrine basins. Seawater intrusion into the freshwater lake of the Songliao Basin promoted some episodes of black shales. Saline lacustrine basins, such as middle Permian Junggar Basin, contain organic-rich dolomite mudstone that mainly formed during hot climate conditions when the lakes had high salinity and stratified water columns that deprived the bottom waters of oxygen, thereby preserving massive amounts of organic matter. Laminated calcite-rich mudstone in the saline lacustrine settings formed in more brackish waters under stable warm conditions and weak biological activity. The modeling of the factors controlling the distribution of organic-matter-rich shales within China's basins is important for the exploration and development of unconventional oil and gas resources.

入藏号: WOS:000462692600004

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16

第 107 条，共 381 条

标题: Current status and geological conditions for the applicability of CBM drilling technologies in China: A review

作者: Tao, S (Tao, Shu); Pan, ZJ (Pan, Zhejun); Tang, SL (Tang, Shuling); Chen, SD (Chen, Shida)

来源出版物: INTERNATIONAL JOURNAL OF COAL GEOLOGY 卷: 202 页: 95-108 DOI: 10.1016/j.coal.2018.11.020 出版年: FEB 1 2019

Web of Science 核心合集中的 "被引频次": 67

被引频次合计: 68

摘要: Coalbed methane (CBM) drilling technology is critical in achieving efficient CBM development. The geological conditions for CBM development in China are complex, including special terrain, high-rank coal areas, deep coal seams, multiple superposed coal seams and coal measure gas symbiosis areas, steeply inclined coal seam areas, and tectonic coal seam areas. Therefore, it is critical to apply the optimum drilling technology in each different area. This paper first reviews the current CBM drilling technologies and gas production behaviors in China. It is found that although vertical wells and cluster well groups are common well types for CBM development in China, U-, V- and L- shaped horizontal wells and multilateral horizontal wells have been favored for CBM development in recent years. The paper then discusses the applicability of different well types to geological conditions and proposes a modification method for well design in various geologic conditions. This method uses the coal structure, R-o, in situ stress, and ratio of critical desorption pressure to the reservoir pressure as the main inputs.

入藏号: WOS:000460492700008

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Energy & Fuels; Geosciences, Multidisciplinary

ISSN: 0166-5162

eISSN: 1872-7840

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16

第 108 条，共 381 条

标题: H-infinity State Estimation for Discrete-Time Nonlinear Singularly Perturbed Complex Networks Under the Round-Robin Protocol

作者: Wan, XB (Wan, Xiongbo); Wang, ZD (Wang, Zidong); Wu, M (Wu, Min); Liu, XH (Liu, Xiaohui)

来源出版物: IEEE TRANSACTIONS ON NEURAL NETWORKS AND LEARNING SYSTEMS 卷: 30 期: 2 页: 415-426 DOI: 10.1109/TNNLS.2018.2839020 出版年: FEB 2019

Web of Science 核心合集中的 "被引频次": 61

被引频次合计: 61

摘要: This paper investigates the H-infinity state estimation problem for a class of discrete-time nonlinear singularly perturbed complex networks (SPCNs) under the Round-Robin (RR) protocol. A discrete-time nonlinear SPCN model is first devised on two time scales with their discrepancies reflected by a singular perturbation parameter (SPP). The network measurement outputs are transmitted via a communication network where the data transmissions are scheduled by the RR protocol with hope to avoid the undesired data collision. The error dynamics of the state estimation is governed by a switched system with a periodic switching parameter. A novel Lyapunov function is constructed that is dependent on both the transmission order and the SPP. By establishing a key lemma specifically tackling the SPP, sufficient conditions are obtained such that, for any SPP less than or equal to a predefined upper bound, the error dynamics of the state estimation is asymptotically stable and satisfies a prescribed H-infinity performance requirement. Furthermore, the explicit parameterization of the desired state estimator is given by means of the solution to a set of matrix inequalities, and the upper bound of the SPP is then evaluated in the feasibility of these matrix inequalities. Moreover, the corresponding results for linear discrete-time SPCNs are derived as corollaries. A numerical example is given to illustrate the effectiveness of the proposed state estimator design scheme.

入藏号: WOS:000457114600008

PubMed ID: 29994721

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Computer Science, Artificial Intelligence; Computer Science, Hardware & Architecture; Computer Science, Theory & Methods; Engineering, Electrical & Electronic

ISSN: 2162-237X

eISSN: 2162-2388

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 109 条，共 381 条

标题: A Correlation-Based Feature Weighting Filter for Naive Bayes

作者: Jiang, LX (Jiang, Liangxiao); Zhang, LG (Zhang, Lungan); Li, CQ (Li, Chaoqun); Wu, J (Wu, Jia)

来源出版物: IEEE TRANSACTIONS ON KNOWLEDGE AND DATA ENGINEERING 卷: 31 期: 2 页: 201-213 DOI: 10.1109/TKDE.2018.2836440 出版年: FEB 1 2019

Web of Science 核心合集中的 "被引频次": 41

被引频次合计: 42

摘要: Due to its simplicity, efficiency, and efficacy, naive Bayes (NB) has continued to be one of the top 10 algorithms in the data mining and machine learning community. Of numerous approaches to alleviating its conditional independence assumption, feature weighting has placed more emphasis on highly predictive features than those that are less predictive. In this paper, we argue that for NB highly predictive features should be highly correlated with the class (maximum mutual relevance), yet uncorrelated with other features (minimum mutual redundancy). Based on this premise, we propose a correlation-based feature weighting (CFW) filter for NB. In CFW, the weight for a feature is a sigmoid transformation of the difference between the feature-class correlation (mutual relevance) and the average feature-feature intercorrelation (average mutual redundancy). Experimental results show that NB with CFW significantly outperforms NB and all the other existing state-of-the-art feature weighting filters used to compare. Compared to feature weighting wrappers for improving NB, the main advantages of CFW are its low computational complexity (no search involved) and the fact that it maintains the simplicity of the final model. Besides, we apply CFW to text classification and have achieved remarkable improvements.

入藏号: WOS:000456148800001

出版商: IEEE COMPUTER SOC

出版商地址: 10662 LOS VAQUEROS CIRCLE, PO BOX 3014, LOS ALAMITOS, CA 90720-1314 USA

Web of Science 类别: Computer Science, Artificial Intelligence; Computer Science, Information Systems; Engineering, Electrical & Electronic

ISSN: 1041-4347

eISSN: 1558-2191

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 110 条，共 381 条

标题: Utilization of red mud in road base and subgrade materials: A review

作者: Mukiza, E (Mukiza, Emile); Zhang, LL (Zhang, LingLing); Liu, XM (Liu, Xiaoming); Zhang, N (Zhang, Na)

来源出版物: RESOURCES CONSERVATION AND RECYCLING 卷: 141 页: 187-199 DOI: 10.1016/j.resconrec.2018.10.031 出版年: FEB 2019

Web of Science 核心合集中的 "被引频次": 44

被引频次合计: 44

摘要: Red mud is highly alkaline slurry produced during alumina extraction from bauxite. Its disposal generates serious environmental pollution. The best way to solve red mud disposal issues is to develop economic utilization technologies that consume significant amounts of red mud. This paper reviews the possibility of utilizing red mud as a road base material, weak subgrade soil stabilizer as well as a subgrade material. Results showed that red mud can be used for those purposes. It was also found that the stabilizing content needed to meet a certain standard differs due to differences in requirements from one country to another. Therefore, there is a need to design proportions with UCS, CBR, leaching characteristics required by the country in which red mud is intended for use. The effect of various stabilizers on performance of red mud is discussed and it transpired that lime showed the best performance followed by dolime fine, ground granulated blast furnace slag, cement kiln dust and fly ash. Findings indicated that red mud shows better performance as a subgrade material than natural soil. Also the synergistic use of red mud and other wastes also improves the mechanical and durability properties of the material compared with using red mud alone. Based on mechanical, economic and environmental benefits, it is recommended to use red mud in road base structure rather than in subgrade despite higher red mud consumption in subgrade than in road base. The scope for future research in this area is also suggested.

入藏号: WOS:000454466300017

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Environmental; Environmental Sciences

ISSN: 0921-3449

eISSN: 1879-0658

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 111 条，共 381 条

标题: Self-template synthesis of double-shell TiO2@ZIF-8 hollow nanospheres via sonocrystallization with enhanced photocatalytic activities in hydrogen generation

作者: Zhang, M (Zhang, Ming); Shang, QG (Shang, Qigao); Wan, YQ (Wan, Yuqi); Cheng, QR (Cheng, Qingrong); Liao, GY (Liao, Guiying); Pan, ZQ (Pan, Zhiquan)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 241 页: 149-158 DOI: 10.1016/j.apcatb.2018.09.036 出版年: FEB 2019

Web of Science 核心合集中的 "被引频次": 55

被引频次合计: 55

摘要: The photocatalytic hydrogen evolution on inorganic semiconductors has been studied for several decades. However, the conversion efficiency of solar energy is still poor caused by the recombination of photo-generated electron-hole pairs. Semiconductors - metal organic frameworks (MOFs) hybrid photocatalysts are being regarded as promising candidates due to large surface area and porosity. Here we reported the coordinative integration of a composite material with efficient capacity of Hy evolution driven by solar light, namely TiO2@ZIF8, made up of titanium dioxide hollow nanospheres (TiO(2)HNPs) externally decorated with zeolitic imidazolate framework-8 (ZIF-8) via a facile sonochemical route. The resulting composite demonstrates the high dispersion of ZIF-8 on the surface of TiO2 HNPs and this kind of close connection makes for an efficient photocatalyst through the synergistic effect. Up to 50.89% of apparent quantum efficiency (AQE), the hybrid double-shell HNPs exhibits 3.5 times higher H-2 evolution rate (HER) than the bare TiO2 HNPs under solar light and shows good stability and recyclability. It is further proposed by photoluminescence spectra and optoelectronic measurement that the remarkably enhanced photocatalytic activity of TiO2@ZIF-8 is not only attributed to the efficient charge separation with electron injection from ZIF-8 to TiO(2)HNPs, but also more active reaction sites provided by cavity structure of ZIF-8. Overall, this work exemplifies that surface engineering of semiconductors with MOFs is a great strategy to achieve advanced photocatalytic performance for solar energy conversion.

入藏号: WOS:000449444000016

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 112 条，共 381 条

标题: In-situ construction of coral-like porous P-doped g-C3N4 tubes with hybrid 1D/2D architecture and high efficient photocatalytic hydrogen evolution

作者: Wu, M (Wu, Mao); Zhang, J (Zhang, Jin); He, BB (He, Bei-bei); Wang, HW (Wang, Huan-wen); Wang, R (Wang, Rui); Gong, YS (Gong, Yan-sheng)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 241 页: 159-166 DOI: 10.1016/j.apcatb.2018.09.037 出版年: FEB 2019

Web of Science 核心合集中的 "被引频次": 76

被引频次合计: 78

摘要: Developing novel methods to prepare hollow one-dimensional (1D) carbon nitride (g-C3N4) nanostructure is highly attractive in photocatalytic water splitting for hydrogen production. Herein, a simple, self-assembly synthesis of coral-like 3D porous P-doped g-C3N4 tubes (PCNT) by the combination of pyrolysis and freeze-drying method was reported. Attributed to the integrated merits of 1D tubular structure, 2D nanosheets and phosphorus doping, the as-prepared hollow PCNT exhibits superior photocatalytic activity under visible light irradiation. Owing to their higher specific surface area, enhanced light absorption, and better charge carrier separation and transfer, the maximum apparent photocatalytic hydrogen evolution rate of PCNT is 2020 mu mol g(-1) h(-1), which is about 4.7 folds and 22.4 folds than that of g-C3N4 tubes and pristine bulk g-C3N4, respectively. Moreover, a possible photocatalytic mechanism and nanostructure formation process based on the experimental results are proposed. The novel growth strategy developed here may offer a new avenue for the rational design and synthesis of potentially efficient photocatalyst with 1D/2D integrated nanoarchitecture.

入藏号: WOS:000449444000017

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 113 条，共 381 条

标题: Enhanced Photocatalytic Activity of B, N-Codoped TiO2 by a New Molten Nitrate Process

作者: Shindume, HL (Shindume, Hamukwaya L.); Zhao, ZY (Zhao, Zengying); Wang, N (Wang, Ning); Liu, H (Liu, Hu); Umar, A (Umar, Ahmad); Zhang, JX (Zhang, Jiaoxia); Wu, TT (Wu, Tingting); Guo, ZH (Guo, Zhanhu)

来源出版物: JOURNAL OF NANOSCIENCE AND NANOTECHNOLOGY 卷: 19 期: 2 页: 839-849 DOI: 10.1166/jnn.2019.15745 出版年: FEB 2019

Web of Science 核心合集中的 "被引频次": 48

被引频次合计: 48

摘要: B, N-codoped titania mesoporous crystals were prepared by the sol-gel method followed by a molten nitrate process to modify the sample morphology. The composition, morphology and microstructure of the obtained samples were characterized by X-ray diffraction (XRD), X-ray photoemission spectroscope (XPS), Brunauer Emmett Teller (BET), scanning electron microscopy (SEM), transmission electron microscopy (TEM), and selected area electron diffraction (SAED). Fourier Transform Infrared spectroscopy (FTIR) revealed weak complex vibrations between the Ti-O oxide species and the unsaturated sites (Ti3+) through the incorporation of hydroxyl groups, which was not observed in the bulk titania (B-N-TiO2). The photocatalytic reactivity of boron-nitrogen codoped TiO2 was examined for the removal of methylene blue (MB) under visible light irradiation. The nitrates treated B-doped TiO2 exhibited better photocatalytic activity for dye degradation than that of B-doped TiO2 and nitrates treated TiO2. The best performance was obtained in the sample treated at a calcination temperature of 550 degrees C.

入藏号: WOS:000448031900031

PubMed ID: 30360161

出版商: AMER SCIENTIFIC PUBLISHERS

出版商地址: 26650 THE OLD RD, STE 208, VALENCIA, CA 91381-0751 USA

Web of Science 类别: Chemistry, Multidisciplinary; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied; Physics, Condensed Matter

ISSN: 1533-4880

eISSN: 1533-4899

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 114 条，共 381 条

标题: New strategy for designing orangish-redemitting phosphor via oxygen-vacancy-induced electronic localization

作者: Wei, Y (Wei, Yi); Xing, GC (Xing, Gongcheng); Liu, K (Liu, Kang); Li, GG (Li, Guogang); Dang, PP (Dang, Peipei); Liang, SS (Liang, Sisi); Liu, M (Liu, Min); Cheng, ZY (Cheng, Ziyong); Jin, DY (Jin, Dayong); Lin, J (Lin, Jun)

来源出版物: LIGHT-SCIENCE & APPLICATIONS 卷: 8 文献号: 15 DOI: 10.1038/s41377-019-0126-1 出版年: JAN 30 2019

Web of Science 核心合集中的 "被引频次": 98

被引频次合计: 99

摘要: Phosphor-converted white-light-emitting diodes (pc-WLED) have been extensively employed as solid-state lighting sources, which have a very important role in people's daily lives. However, due to the scarcity of the red component, it is difficult to realize warm white light efficiently. Hence, red-emitting phosphors are urgently required for improving the illumination quality. In this work, we develop a novel orangish-red La4GeO8:Bi3+ phosphor, the emission peak of which is located at 600 nm under near-ultraviolet (n-UV) light excitation. The full width at half maximum (fwhm) is 103 nm, the internal quantum efficiency (IQE) exceeds 88%, and the external quantum efficiency (EQE) is 69%. According to Rietveld refinement analysis and density functional theory (DFT) calculations, Bi3+ ions randomly occupy all La sites in orthorhombic La4GeO8. Importantly, the oxygen-vacancy-induced electronic localization around the Bi3+ ions is the main reason for the highly efficient orangish-red luminescence. These results provide a new perspective and insight from the local electron structure for designing inorganic phosphor materials that realize the unique luminescence performance of Bi3+ ions.

入藏号: WOS:000458554000002

PubMed ID: 30728955

出版商: CHINESE ACAD SCIENCES, CHANGCHUN INST OPTICS FINE MECHANICS AND PHYSICS

出版商地址: 3888, DONGNANHU ROAD, CHANGCHUN, 130033, PEOPLES R CHINA

Web of Science 类别: Optics

ISSN: 2047-7538

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 115 条，共 381 条

标题: Method Development for Direct Multielement Quantification by LA-ICP-MS in Food Samples

作者: Li, YT (Li, Yatai); Guo, W (Guo, Wei); Hu, ZC (Hu, Zhaochu); Jin, LL (Jin, Lanlan); Hui, SH (Hui, Shenghong); Guo, QH (Guo, Qinghai)

来源出版物: JOURNAL OF AGRICULTURAL AND FOOD CHEMISTRY 卷: 67 期: 3 页: 935-942 DOI: 10.1021/acs.jafc.8b05479 出版年: JAN 23 2019

Web of Science 核心合集中的 "被引频次": 22

被引频次合计: 22

摘要: A novel calibration strategy for the accurate determination of essential and toxic elements in both plant-based and animal-based foods was developed by synthesizing spiked agarose gels as matrix-matched external standards and carbon as the internal standard (IS). Aqueous solutions of agarose (4%, m/v) with defined amounts of the analytes were cast on a mold and then dried to form the agarose-gel standards. The spatial distributions of the analytes in the gel were examined using surface- and depth-mapping laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS) protocols, and the gel homogeneity was found to be excellent (i.e., relative standard derivation <10%). Recovery of the 19 spiked elements in the gel standards was in the range of 86.9-94.7%. The limits of detection (LODs) ranged from 0.0005 (Rb) to 33.7 mu g g(-1) (S). Analysis results were in good agreement with certified values for various certified reference materials (CRMs). Furthermore, a porous rubber sample supporter was developed to improve the analysis throughput by about 3-fold.

入藏号: WOS:000457067100017

PubMed ID: 30592410

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Agriculture, Multidisciplinary; Chemistry, Applied; Food Science & Technology

ISSN: 0021-8561

eISSN: 1520-5118

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 116 条，共 381 条

标题: Very high resolution remote sensing image classification with SEEDS-CNN and scale effect analysis for superpixel CNN classification

作者: Lv, XW (Lv, Xianwei); Ming, D (Ming, Dongping); Chen, YY (Chen, YangYang); Wang, M (Wang, Min)

来源出版物: INTERNATIONAL JOURNAL OF REMOTE SENSING 卷: 40 期: 2 页: 506-531 DOI: 10.1080/01431161.2018.1513666 出版年: JAN 17 2019

Web of Science 核心合集中的 "被引频次": 36

被引频次合计: 36

摘要: Pixel-based convolutional neural network (CNN) has demonstrated good performance in the classification of very high resolution images (VHRI) from which abstract deep features are extracted. However, conventional pixel-based CNN demands large resources in terms of processing time and disk space. Therefore, superpixel CNN classification has recently become a focus of attention. We therefore propose a CNN based deep learning method combining superpixels extracted via energy-driven sampling (SEEDS) for VHRI classification. The approach consists of three main steps. First, based on the concept of geographic object-based image analysis (GEOBIA), the image is segmented into homogeneous superpixels using the SEEDS based superpixel segmentation method thereby decreasing the number of processing units. Second, the training data and testing data are extracted from the image and concatenated on a superpixel level at a variety of scales for CNN. Third, the training data are input to train the parameters of CNN and abstract deep features are extracted from the VHRI. Using these extracted deep features, we classify two VHRI data sets at single scales and multiple scales. To verify the effectiveness of SEEDS based CNN classification, the performance of SEEDS and three others superpixel segmentation algorithms are compared, and the superpixel extraction via SEEDS method was found to be the optimal superpixel segmentation approach for CNN classification. The scale effect on CNN classification accuracy was investigated by comparing the four superpixel segmentation methods. We found that (1) There is no strong evidence that using scales combinations is better than a single scale in some specific situations; (2) Natural objects with low complexity are not as sensitive to scale as artificial objects; (3) For a simple VHRI that contains clear artificial objects and simple texture, the classification result with multiple scales performs better a the single scale; (4) In contrast, for the complex VHRI containing a large number of complex objects, the classification result with a single small-scale best.

入藏号: WOS:000457495600005

出版商: TAYLOR & FRANCIS LTD

出版商地址: 2-4 PARK SQUARE, MILTON PARK, ABINGDON OR14 4RN, OXON, ENGLAND

Web of Science 类别: Remote Sensing; Imaging Science & Photographic Technology

ISSN: 0143-1161

eISSN: 1366-5901

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 117 条，共 381 条

标题: The Kobresia pygmaea ecosystem of the Tibetan highlands - Origin, functioning and degradation of the world's largest pastoral alpine ecosystem Kobresia pastures of Tibet

作者: Miehe, G (Miehe, Georg); Schleuss, PM (Schleuss, Per-Marten); Seeber, E (Seeber, Elke); Babel, W (Babel, Wolfgang); Biermann, T (Biermann, Tobias); Braendle, M (Braendle, Martin); Chen, FH (Chen, Fahu); Coners, H (Coners, Heinz); Foken, T (Foken, Thomas); Gerken, T (Gerken, Tobias); Graf, HF (Graf, Hans-F.); Guggenberger, G (Guggenberger, Georg); Hafner, S (Hafner, Silke); Holzapfel, M (Holzapfel, Maika); Ingrisch, J (Ingrisch, Johannes); Kuzyakov, Y (Kuzyakov, Yakov); Lai, ZP (Lai, Zhongping); Lehnert, L (Lehnert, Lukas); Leuschner, C (Leuschner, Christoph); Li, XG (Li, Xiaogang); Liu, JQ (Liu, Jianquan); Liu, SB (Liu, Shibin); Ma, YM (Ma, Yaoming); Miehe, S (Miehe, Sabine); Mosbrugger, V (Mosbrugger, Volker); Noltie, HJ (Noltie, Henry J.); Schmidt, J (Schmidt, Joachim); Spielvogel, S (Spielvogel, Sandra); Unteregelsbacher, S (Unteregelsbacher, Sebastian); Wang, Y (Wang, Yun); Willinghofer, S (Willinghoefer, Sandra); Xu, XL (Xu, Xingliang); Yang, YP (Yang, Yongping); Zhang, SR (Zhang, Shuren); Opgenoorth, L (Opgenoorth, Lars); Wesche, K (Wesche, Karsten)

来源出版物: SCIENCE OF THE TOTAL ENVIRONMENT 卷: 648 页: 754-771 DOI: 10.1016/j.scitotenv.2018.08.164 出版年: JAN 15 2019

Web of Science 核心合集中的 "被引频次": 43

被引频次合计: 48

摘要: With 450,000 km(2) Kobresia (syn. Carex) pygmaea dominated pastures in the eastern Tibetan highlands are the world's largest pastoral alpine ecosystemforming a durable turf cover at 3000-6000 m a.s.l. Kobresia's resilience and competitiveness is based on dwarf habit, predominantly below-ground allocation of photo assimilates, mixture of seed production and clonal growth, and high genetic diversity. Kobresia growth is co-limited by livestock-mediated nutrient withdrawal and, in the drier parts of the plateau, low rainfall during the short and cold growing season. Overstocking has caused pasture degradation and soil deterioration over most parts of the Tibetan highlands and is the basis for this man-made ecosystem. Natural autocyclic processes of turf destruction and soil erosion are initiated through polygonal turf cover cracking, and accelerated by soil-dwelling endemic small mammals in the absence of predators. The major consequences of vegetation cover deterioration include the release of large amounts of C, earlier diurnal formation of clouds, and decreased surface temperatures. These effects decrease the recovery potential of Kobresia pastures and make them more vulnerable to anthropogenic pressure and climate change. Traditional migratory rangeland management was sustainable over millennia, and possibly still offers the best strategy to conserve and possibly increase C stocks in the Kobresia turf. (C) 2018 The Authors. Published by Elsevier B.V.

入藏号: WOS:000447805500070

PubMed ID: 30134213

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Environmental Sciences

ISSN: 0048-9697

eISSN: 1879-1026

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 118 条，共 381 条

标题: Mine Fracturing Monitoring Analysis Based on High-Precision Distributed Wireless Microseismic Acquisition Station

作者: Qiao, SQ (Qiao, Shuaiqing); Zhang, QS (Zhang, Qisheng); Zhang, QM (Zhang, Qimao)

来源出版物: IEEE ACCESS 卷: 7 页: 147215-147223 DOI: 10.1109/ACCESS.2019.2946443 出版年: 2019

Web of Science 核心合集中的 "被引频次": 64

被引频次合计: 64

摘要: A large number of shallow fossil fuel energy sources have been exhausted, including coal, oil, natural gas, and other non-renewable energy sources with rapid industrial development. The mining of fossil fuel energy has gradually shifted to the deep layers of the stratum, where safety is more difficult to guarantee. As a result, the development of a data acquisition system that can be used for microseismic monitoring and disaster prediction is imminent. In this study, in order to complete the design of a high-precision acquisition circuit, main control circuit, and other hardware circuits, the authors developed a set of high-precision distributed wireless microseismic acquisition stations, which was combined with three-component geophones to complete a microseismic monitoring system. This monitoring system was then verified through on-site work during the construction of a coal mine in China. This paper focuses on a detailed analysis of the data collected by the acquisition stations. Firstly, twelve sets of acquisition stations were used to conduct fixed-location blasting tests of the mine, which yielded good test results. Secondly, an analysis of microseismic monitoring data obtained during deep-well fracturing was carried out, and pre-fracturing static monitoring, carbon dioxide monitoring, fracturing monitoring, and post-fracturing static monitoring were also completed. This paper provides a detailed introduction to fracturing monitoring data of mines, combining discussions on the other three types of mine monitoring to reach relevant conclusions.

入藏号: WOS:000513685800001

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Computer Science, Information Systems; Engineering, Electrical & Electronic; Telecommunications

ISSN: 2169-3536

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 119 条，共 381 条

标题: Improving NoSQL Storage Schema Based on Z-Curve for Spatial Vector Data

作者: Zhang, DF (Zhang, Dongfang); Wang, Y (Wang, Yong); Liu, ZL (Liu, Zhenling); Dai, SJ (Dai, Shijie)

来源出版物: IEEE ACCESS 卷: 7 DOI: 10.1109/ACCESS.2019.2922693 出版年: 2019

Web of Science 核心合集中的 "被引频次": 87

被引频次合计: 87

摘要: NoSQL database can provide massive, high concurrency, and scalable services for storing different types of data. HBase, a type of NoSQL database, in which columns are grouped into column families, is very suitable for storing semi-structured or unstructured spatial vector data. However, since there are few rules and constraints to be followed for the NoSQL database, the design of storage schema for spatial data based on NoSQL is difficult. In this paper, based on our early work, an improved Z-curve storage schema is proposed for spatial vector data. According to our new schema, row key of a geometric object is the Z-curve code of the spatial grids intersected with the geometric object. Moreover, geometric objects with the same row key are stored in a column family. Our proposed method has two features. First, geometric objects adjacent in the location are adjacent in physical storage. Second, redundant exists in storage for improving query accuracy. In our experiments, we compare the improved Z-curve storage schema with a Quadtree storage schema, an R-tree storage schema, and the previous Z-curve storage schema. Query response time, memory usage, and the query accuracy of spatial query on point and range are used to verify the validity of our proposed method. The experimental results show that the two storage schemas based on Z-curve achieve higher query efficiency than the two storage schemas based on tree-the Quadtree storage schema and the R-tree storage schema. More importantly, the query results of the improved Z-curve schema are completely correct, while the query results of the previous Z-curve schema are not.

入藏号: WOS:000473820000001

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Computer Science, Information Systems; Engineering, Electrical & Electronic; Telecommunications

ISSN: 2169-3536

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 120 条，共 381 条

标题: Satellite Remote Sensing of Surface Urban Heat Islands: Progress, Challenges, and Perspectives

作者: Zhou, DC (Zhou, Decheng); Xiao, JF (Xiao, Jingfeng); Bonafoni, S (Bonafoni, Stefania); Berger, C (Berger, Christian); Deilami, K (Deilami, Kaveh); Zhou, YY (Zhou, Yuyu); Frolking, S (Frolking, Steve); Yao, R (Yao, Rui); Qiao, Z (Qiao, Zhi); Sobrino, JA (Sobrino, Jose A.)

来源出版物: REMOTE SENSING 卷: 11 期: 1 文献号: 48 DOI: 10.3390/rs11010048 出版年: JAN 1 2019

Web of Science 核心合集中的 "被引频次": 104

被引频次合计: 107

摘要: The surface urban heat island (SUHI), which represents the difference of land surface temperature (LST) in urban relativity to neighboring non-urban surfaces, is usually measured using satellite LST data. Over the last few decades, advancements of remote sensing along with spatial science have considerably increased the number and quality of SUHI studies that form the major body of the urban heat island (UHI) literature. This paper provides a systematic review of satellite-based SUHI studies, from their origin in 1972 to the present. We find an exponentially increasing trend of SUHI research since 2005, with clear preferences for geographic areas, time of day, seasons, research foci, and platforms/sensors. The most frequently studied region and time period of research are China and summer daytime, respectively. Nearly two-thirds of the studies focus on the SUHI/LST variability at a local scale. The Landsat Thematic Mapper (TM)/Enhanced Thematic Mapper (ETM+)/Thermal Infrared Sensor (TIRS) and Terra/Aqua Moderate Resolution Imaging Spectroradiometer (MODIS) are the two most commonly-used satellite sensors and account for about 78% of the total publications. We systematically reviewed the main satellite/sensors, methods, key findings, and challenges of the SUHI research. Previous studies confirm that the large spatial (local to global scales) and temporal (diurnal, seasonal, and inter-annual) variations of SUHI are contributed by a variety of factors such as impervious surface area, vegetation cover, landscape structure, albedo, and climate. However, applications of SUHI research are largely impeded by a series of data and methodological limitations. Lastly, we propose key potential directions and opportunities for future efforts. Besides improving the quality and quantity of LST data, more attention should be focused on understudied regions/cities, methods to examine SUHI intensity, inter-annual variability and long-term trends of SUHI, scaling issues of SUHI, the relationship between surface and subsurface UHIs, and the integration of remote sensing with field observations and numeric modeling.

入藏号: WOS:000457935600048

出版商: MDPI

出版商地址: ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND

Web of Science 类别: Remote Sensing

eISSN: 2072-4292

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 121 条，共 381 条

标题: Overview of recent advances in stability of linear systems with time-varying delays

作者: Zhang, XM (Zhang, Xian-Ming); Han, QL (Han, Qing-Long); Seuret, A (Seuret, Alexandre); Gouaisbaut, F (Gouaisbaut, Frederic); He, Y (He, Yong)

来源出版物: IET CONTROL THEORY AND APPLICATIONS 卷: 13 期: 1 页: 1-16 DOI: 10.1049/iet-cta.2018.5188 出版年: JAN 1 2019

Web of Science 核心合集中的 "被引频次": 84

被引频次合计: 87

摘要: This study provides an overview and in-depth analysis of recent advances in stability of linear systems with time-varying delays. First, recent developments of a delay convex analysis approach, a reciprocally convex approach and the construction of Lyapunov-Krasovskii functionals are reviewed insightfully. Second, in-depth analysis of the Bessel-Legendre inequality and some affine integral inequalities is made, and recent stability results are also summarised, including stability criteria for three cases of a time-varying delay, where information on the bounds of the time-varying delay and its derivative is totally known, partly known and completely unknown, respectively. Third, a number of stability criteria are developed for the above three cases of the time-varying delay by employing canonical Bessel-Legendre inequalities, together with augmented Lyapunov-Krasovskii functionals. It is shown through numerical examples that these stability criteria outperform some existing results. Finally, several challenging issues are pointed out to direct the near future research.

入藏号: WOS:000455640300001

出版商: INST ENGINEERING TECHNOLOGY-IET

出版商地址: MICHAEL FARADAY HOUSE SIX HILLS WAY STEVENAGE, HERTFORD SG1 2AY, ENGLAND

Web of Science 类别: Automation & Control Systems; Engineering, Electrical & Electronic; Instruments & Instrumentation

ISSN: 1751-8644

eISSN: 1751-8652

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 122 条，共 381 条

标题: Sampled-data-based dissipative control of T-S fuzzy systems

作者: Zeng, HB (Zeng, Hong-Bing); Teo, KL (Teo, Kok Lay); He, Y (He, Yong); Wang, W (Wang, Wei)

来源出版物: APPLIED MATHEMATICAL MODELLING 卷: 65 页: 415-427 DOI: 10.1016/j.apm.2018.08.012 出版年: JAN 2019

Web of Science 核心合集中的 "被引频次": 64

被引频次合计: 67

摘要: This paper investigates the problem of sampled-data-based dissipative control of Takagi-Sugeno (T-S) fuzzy systems. The sampling period is assumed to be varying within an interval. By making full use of realistic information about the whole sampling interval, we propose a novel complete sampling-interval-dependent looped function, which depends not only on the interval from x(t) to x(t(k)) but also on the interval from x(t) to x(t(k+1)). Based on this function, a sufficient condition is established, ensuring the considered system strictly (Q, S, R) - gamma-dissipative. Furthermore, a approach to design desired sampled-data controllers is proposed. It is applied to solve the problems of a truck-trailer and an inverted pendulum. From the results obtained, we see that this approach is highly effective. (C) 2018 Elsevier Inc. All rights reserved.

入藏号: WOS:000454970400025

出版商: ELSEVIER SCIENCE INC

出版商地址: 360 PARK AVE SOUTH, NEW YORK, NY 10010-1710 USA

Web of Science 类别: Engineering, Multidisciplinary; Mathematics, Interdisciplinary Applications; Mechanics

ISSN: 0307-904X

eISSN: 1872-8480

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 123 条，共 381 条

标题: Regional structural control on the distribution of world-class gold deposits: An overview from the Giant Jiaodong Gold Province, China

作者: Deng, J (Deng, Jun); Yang, LQ (Yang, Li-Qiang); Li, RH (Li, Rui-Hong); Groves, DI (Groves, David I.); Santosh, M (Santosh, M.); Wang, ZL (Wang, Zhong-Liang); Sai, SX (Sai, Sheng-Xun); Wang, SR (Wang, Si-Rui)

来源出版物: GEOLOGICAL JOURNAL 卷: 54 期: 1 页: 378-391 DOI: 10.1002/gj.3186 出版年: JAN-FEB 2019

Web of Science 核心合集中的 "被引频次": 37

被引频次合计: 42

摘要: The Jiaodong gold province in northeastern China is the country's premier gold resource and globally one of the most important gold provinces. The late Early Cretaceous gold metallogeny in this belt remains an enigma as it is hosted in the Archean Jiaobei Terrane of the North China Block and, to a lesser extent, within the Palaeoproterozoic Sulu Terrane of the South China Block. The driving force for widespread Late Jurassic and Early Cretaceous granitic magmatism, the switchover from a compressional to extensional tectonic regime, and gold mineralization are considered to be a combination of plate subduction with lithospheric delamination and consequent asthenospheric upwelling. Although many aspects related to the genesis of the gold deposits in Jiaodong have been resolved, the spatial distribution of the world-class gold deposits in this belt, which is of vital importance to brownfields and greenfields exploration, has been poorly understood in terms of the structural evolution of the province. In the northwestern segment of the Jiaobei Terrane, the world-class gold deposits of Sanshandao in the west, through Jiaojia, to Linglong in the east define a broadly E-W corridor. This corridor links a series of east-verging jogs on ore-controlling NNE-trending oblique-slip faults that are subparallel to an lithospheric-scale Tan-Lu Fault to the west. There is cryptic evidence that these jogs line up in the E-W trend due to reactivation of Palaeoproterozoic to Mesozoic faults and folds that were part of the structural architecture of the terranes prior to the gold event. These jogs induced deviations in the local principal stresses relative to regional equivalent stresses, with resultant heterogeneous strain, increased rock permeability, and focussed ore-fluid ingress. Both disseminated/microbreccia-stockwork and vein-type gold deposits formed in this corridor, with the former being predominant and the latter having a higher gold grade. In contrast, predominant vein-type gold deposits in the eastern segment of the Jiaobei and Sulu terranes tend to form N-S corridors. These vein-type ores may relate to rotational strain induced by movement on pairs of more linear NNE-trending faults with the same kinematic movement sense.

入藏号: WOS:000455038100025

出版商: WILEY

出版商地址: 111 RIVER ST, HOBOKEN 07030-5774, NJ USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0072-1050

eISSN: 1099-1034

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 124 条，共 381 条

标题: Source analysis of quartz from the Upper Ordovician and Lower Silurian black shale and its effects on shale gas reservoir in the southern Sichuan Basin and its periphery, China

作者: Han, C (Han, Chao); Han, M (Han, Mei); Jiang, ZX (Jiang, Zaixing); Han, ZZ (Han, Zuozhen); Li, H (Li, Hao); Song, ZG (Song, Zhigang); Zhong, WJ (Zhong, Wenjian); Liu, KX (Liu, Kaixuan); Wang, CH (Wang, Chunhao)

来源出版物: GEOLOGICAL JOURNAL 卷: 54 期: 1 页: 438-449 DOI: 10.1002/gj.3192 出版年: JAN-FEB 2019

Web of Science 核心合集中的 "被引频次": 49

被引频次合计: 50

摘要: A major breakthrough in shale gas exploration and development has been made concerning the black shale of the Upper Ordovician and Lower Silurian. In recent years, significant progresses have been made regarding the exploration and development of shale gas in the black shale of the Upper Ordovician and Lower Silurian. Accordingly, we investigated the petrological and geochemical characteristics of the black shale from WF2-LM5 graptolite biozones and performed a source analysis of quartz as well as evaluated its effect on shale gas reservoirs. The black shale mainly contains clay, carbonate, and quartz with the average TOC of 2.21%. Three quartz types, Q(1), Q(2), and Q(3), were identified via petrological and cathodoluminescence (CL) analysis. Q(1) of detrital origin as suggested by its typical morphology with monocrystal structure, large grain-size, subrounded to angular outlines, and clear edges. This is further supported by the occurrence of medium luminescence under cathodoluminescence and medium intensity of P-1 and P-2 and high intensity P-3 according to CL images. Q(2) accounts for more than 90% of quartz and exhibits cryptocrystalline texture, an irregular shape, blurring edges, and low luminescence, and its CL images show low intensity P-1, low intensity P-2, and high intensity P-3. Q(3) have the morphologies of siliceous organisms, for example, sponge spicules, radiolaria, and foraminifera. Q(2) and Q(3) belong to authigenic quartz derived from siliceous organisms. Th/U and V/Cr indicate black shale from LM1-3 mainly deposited in the dysoxic-anoxic environment while black shale from LM4-5 deposited in the oxic environment. Authigenic quartz-rich shales from LM1-3 were speculated to be the best shale gas reservoirs characterized by high TOC content, high gas content, and with negligible amount of detrital quartz. Compared with shale from LM1-3, black shale from LM4-5 usually have relatively high detrital quartz content and low TOC content and gas content. Considering the abundant interparticle pore space, the detrital quartz-rich shale interbedded within the black shale from LM4-5, could also become good shale gas reservoirs if sufficient gas supply is guaranteed.

入藏号: WOS:000455038100029

出版商: WILEY

出版商地址: 111 RIVER ST, HOBOKEN 07030-5774, NJ USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0072-1050

eISSN: 1099-1034

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 125 条，共 381 条

标题: Permian integrative stratigraphy and timescale of China

作者: Shen, SZ (Shen, Shuzhong); Zhang, H (Zhang, Hua); Zhang, YC (Zhang, Yichun); Yuan, DX (Yuan, Dongxun); Chen, B (Chen, Bo); He, WH (He, Weihong); Mu, L (Mu, Lin); Lin, W (Lin, Wei); Wang, WQ (Wang, Wenqian); Chen, J (Chen, Jun); Wu, Q (Wu, Qiong); Cao, CQ (Cao, Changqun); Wang, Y (Wang, Yue); Wang, XD (Wang, Xiangdong)

来源出版物: SCIENCE CHINA-EARTH SCIENCES 卷: 62 期: 1 特刊: SI 页: 154-188 DOI: 10.1007/s11430-017-9228-4 出版年: JAN 2019

Web of Science 核心合集中的 "被引频次": 39

被引频次合计: 41

摘要: A series of global major geological and biological events occurred during the Permian Period. Establishing a highresolution stratigraphic and temporal framework is essential to understand their cause-effect relationship. The official International timescale of the Permian System consists of three series (i.e., Cisuralian, Guadalupian and Lopingian in ascending order) and nine stages. In China, the Permian System is composed of three series (Chuanshanian, Yansingian and Lopingian) and eight stages, of which the subdivisions and definitions of the Chuanshanian and Yangsingian series are very different from the Cisuralian and Guadalupian series. The Permian Period spanned approximate to 47 Myr. Its base is defined by the First Appearance Datum (FAD) of the conodont Streptognathodus isolatus at Aidaralash, Kazakhstan with an interpolated absolute age 298.9 +/- 0.15 Ma at Usolka, southern Urals, Russia. Its top equals the base of the Triassic System and is defined by the FAD of the conodont Hindeodus parvus at Meishan D section, southeast China with an interpolated absolute age 251.902 +/- 0.024 Ma. Thirty-five conodont, 23 fusulinid, 17 radiolarian and 20 ammonoid zones are established for the Permian in China, of which the Guadalupian and Lopingian conodont zones have been served as the standard for international correlation. The Permian C-13(carb) trend indicates that it is characterized by a rapid negative shift of 3-5 parts per thousand at the end of the Changhsingian, which can be used for global correlation of the end-Permian mass extinction interval, but C-13(carb) records from all other intervals may have more or less suffered subsequent diagenetic alteration or represented regional or local signatures only. Permian O-18{ainpatite} studies suggest that an icehouse stage dominated the time interval from the late Carboniferous to Kungurian (late Cisuralian). However, paleoclimate began to ameriolate during the late Kungurian and gradually shifted into a greenhouse-dominated stage during the Guadalupian. The Changhsingian was a relatively cool stage, followed by a globally-recognizable rapid temperature rise of 8-10 degrees C at the very end of the Changhsingian. The Sr-87/Sr-86 ratio trend shows that their values at the beginning of the Permian were between 0.70800, then gradually decreased to the late Capitanian minimum 0.70680-0.70690, followed by a persistent increase until the end of the Permian with the value 0.70708. Magenetostratigraphy suggests two distinct stages separated by the Illawarra Reversal in the middle Wordian, of which the lower is the reverse polarity Kiaman Superchron and the upper is the mixed-polarity Illawarra Superchron. The end-Guadalupian (or pre-Lopingian) biological crisis occurred during the late Capitanian, when faunal changeovers of different fossil groups had different paces, but generally experienced a relatively long time from the Jinogondolella altudensis Zone until the earliest Wuchiapingian. The end-Permian mass extinction was a catastrophic event that is best constrained at the Meishan section, which occurred at 251.941 +/- 0.037 Ma and persisted no more than 61 +/- 48 kyr. After the major pulse at Bed 25, the extinction patterns are displayed differently in different sections. The global end-Guadalupian regression is manifested between the conodont Jinogondolella xuanhanensis and Clarkina dukouensis zones and the end-Changhsingian transgression began in the Hindeodus changxingensis-Clarkina zhejiangensis Zone.

The Permian Period is also characterized by strong faunal provincialism in general, which resulted in difficulties in inter-continental and inter-regional correlation of both marine and terrestrial systems.

入藏号: WOS:000455070400008

出版商: SCIENCE PRESS

出版商地址: 16 DONGHUANGCHENGGEN NORTH ST, BEIJING 100717, PEOPLES R CHINA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1674-7313

eISSN: 1869-1897

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 126 条，共 381 条

标题: In situ stress heterogeneity in a highly developed strike-slip fault zone and its effect on the distribution of tight gases: A 3D finite element simulation study

作者: Yin, S (Yin, Shuai); Xie, RC (Xie, Runcheng); Wu, ZH (Wu, Zhonghu); Liu, J (Liu, Jian); Ding, WL (Ding, Wenlong)

来源出版物: MARINE AND PETROLEUM GEOLOGY 卷: 99 页: 75-91 DOI: 10.1016/j.marpetgeo.2018.10.007 出版年: JAN 2019

Web of Science 核心合集中的 "被引频次": 41

被引频次合计: 42

摘要: Strike-slip fault zones are an important type of structure formed during continental orogenic events. Exploring the influence of strike-slip faults on the distribution of natural gas by using the 3D finite element method (FEM) is a frontier in the field of geoscience. In this paper, the effects of strike-slip faults on the heterogeneity of in situ stress and reservoir quality were systematically studied in a shallow commercial coalbed methane reservoir in the Shanxi Formation in the southern Qinshui Basin. Systematic 3D FEM modeling and in situ stress evaluation of a highly developed strike-slip fault zone were conducted. The results indicate that the simulated in situ stress distributions of sigma(H), sigma(h) and sigma(v) in the target layer present ranges of 10-55 MPa, 3-23 MPa and 5-30 MPa, respectively, which are consistent with acoustic emission and hydraulic fracturing measurements. Along the strike slip faults, the distribution of horizontal in situ stress is mainly affected by the fault length and vertical throw. The stress magnitude differs greatly between the two sides of a given strike-slip fault, affecting the compaction degree and petrophysical properties of the gas-bearing reservoir on both sides of the fault. Along the strike of a given strike-slip fault, the minimum horizontal in situ stress exhibits distinct segmentation characteristics, which affect the distribution of wells with a higher and lower yields. For the 2 s-order faults (the Sitou and Houchengyao faults), wells with a higher gas production capacity are typically located on the northwestern side of the faults. In the middle and southern sections of the Sitou-Houchengyao strike-slip fault zone, both highly concentrated faults and large-scale opening faults (basement and surface faults) produce greater stress concentrations, and the gas production capacity of the gas wells in these areas is poor. When the main strike direction of the faults is consistent with the loading direction of the boundary stress, the stress concentration is relatively low; whereas, the stress concentration increases as the angle between the main fault strike and the loading direction increases. The shear stress of the target layer is characterized by clockwise rotation, which is an important control on the stress heterogeneity of the strike-slip faults in the study area.

入藏号: WOS:000453492600006

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0264-8172

eISSN: 1873-4073

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 127 条，共 381 条

标题: Pseudocapacitive Co9S8/graphene electrode for high-rate hybrid supercapacitors

作者: Xie, BQ (Xie, Bingqiao); Yu, MY (Yu, Mengying); Lu, LH (Lu, Luhua); Feng, HZ (Feng, Huazhang); Yang, Y (Yang, Yang); Chen, Y (Chen, Ying); Cui, HD (Cui, Hongda); Xiao, RB (Xiao, Rubo); Liu, J (Liu, Jian)

来源出版物: CARBON 卷: 141 页: 134-142 DOI: 10.1016/j.carbon.2018.09.044 出版年: JAN 2019

Web of Science 核心合集中的 "被引频次": 56

被引频次合计: 54

摘要: Cobalt pentlandite (Co9S8) has recently emerged as a promising electrode material for energy storage devices. Herein, Co9S8/graphene hybrid is rationally synthesized through a facile hydrothermal method. Minor-sized Co9S8 flakes is finely-deposited on the surface of graphene sheet and an interconnected Co9S8/graphene architecture structure is obtained. The electrochemical test results show that Co9S8/graphene electrode delivers a remarkable charge capacity of 540 C g(-1) within 1 min and 74.5% capacitance is retained within a discharge time of 14 s. A hybrid supercapacitor assembled with Co9S8-involved electrode delivers a high energy density of 37 Wh kg(-1) at a power density of 170 W kg(-1), and 15.3 Wh kg(-1) can be maintained even at a high power density of 12 kW kg(-1). The excellent electrochemical performance should be attributed to abundant active sites, enhanced charge-transfer characters and maximized capacitive contribution of Co9S8/graphene electrode. (C) 2018 Elsevier Ltd. All rights reserved.

入藏号: WOS:000450312600015

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Chemistry, Physical; Materials Science, Multidisciplinary

ISSN: 0008-6223

eISSN: 1873-3891

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 128 条，共 381 条

标题: A high-performance Bi2O3/Bi2SiO5 p-n heterojunction photocatalyst induced by phase transition of Bi2O3

作者: Lu, HJ (Lu, Haojie); Hao, Q (Hao, Qiang); Chen, T (Chen, Tong); Zhang, LH (Zhang, Linghua); Chen, DM (Chen, Daimei); Ma, C (Ma, Chao); Yao, WQ (Yao, Wenqing); Zhu, YF (Zhu, Yongfa)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 237 页: 59-67 DOI: 10.1016/j.apcatb.2018.05.069 出版年: DEC 5 2018

Web of Science 核心合集中的 "被引频次": 83

被引频次合计: 83

摘要: In this work, Bi2O3/Bi2SiO5 p-n heterojunction photocatalyst was successfully fabricated via a facile one-step synthesis using Bi(NO3)(3) and nano-SiO2 as precursors. With the increasing amount of SiO2, alpha-Bi2O3 gradually transferred into beta-Bi2O3, and Bi2O3/Bi2SiO5 p-n heterojunction was obtained at the same time. The as-prepared samples were systematically characterized by XRD, scanning electron microscopy (SEM), energy-dispersive spectrometry (EDS), transmission electron microscopy (TEM), X-ray photoelectron spectroscopy (XPS), UV-vis diffuse reflectance spectroscopy (DRS). The Bi2O3/Bi2SiO5 heterojunction photocatalysts exhibited higher photocatalytic activity than alpha-Bi2O3 on the degradation of organic pollutants under simulated sunlight irradiation. The enhanced photocatalytic activity could be ascribed to the larger specific surface area, the larger contact angle, the formation of beta-Bi2O3 and construction of p-n heterojunction. More importantly, the phase transition mechanism of Bi2O3 in Bi2O3/Bi2SiO5 heterojunction photocatalyst was proposed, which is significant for the theoretical study and application of photocatalytic materials.

入藏号: WOS:000442973700008

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 129 条，共 381 条

标题: Thickness-Dependent Facet Junction Control of Layered BiOIO3 Single Crystals for Highly Efficient CO2 Photoreduction

作者: Chen, F (Chen, Fang); Huang, HW (Huang, Hongwei); Ye, LQ (Ye, Liqun); Zhang, TR (Zhang, Tierui); Zhang, YH (Zhang, Yihe); Han, XP (Han, Xiaopeng); Ma, TY (Ma, Tianyi)

来源出版物: ADVANCED FUNCTIONAL MATERIALS 卷: 28 期: 46 文献号: 1804284 DOI: 10.1002/adfm.201804284 出版年: NOV 14 2018

Web of Science 核心合集中的 "被引频次": 190

被引频次合计: 190

摘要: Thin layer fabrication and crystal facet engineering favor the prompt charge transfer from bulk to the surface of a material and spatial charge separation among different facets, tremendously benefitting photocatalytic activity. However, the thickness and surface facet composition are considered as two entwined characteristics of layered materials with well-defined and tunable shapes, which possess great promise to achieve the simultaneous manipulation of charge transfer and spatial separation. Herein, it is demonstrated that one solution for the aforementioned issue by controllably regulating the surface {010}/{100} facet junctions of a layered thickness-tunable bismuth-based material, BiOIO3. The attenuation in thickness of BiOIO3 nanoplates shortens the diffusion pathway of charge carriers, and more importantly the tuning of nanolayer thickness renders the ratio variation of the top {010} facet to the lateral {100} facet, which dominates the spatial separation of photogenerated electrons and holes. As a result, the highest CO evolution rate from CO2 reduction over BiOIO3 nanoplates with the optimal thickness and ratio of exposed facets reaches 5.42 mu mol g(-1) h(-1), over 300% that of the bulk counterpart (1.77 mu mol g(-1) h(-1)). This work paves a new way for governing charge movement behaviors on the basis of the synergistic engineering of layer structure and exposing facets.

入藏号: WOS:000449887300010

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary; Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied; Physics, Condensed Matter

ISSN: 1616-301X

eISSN: 1616-3028

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 130 条，共 381 条

标题: East Asian hydroclimate modulated by the position of the westerlies during Termination I

作者: Zhang, HB (Zhang, Hongbin); Griffiths, ML (Griffiths, Michael L.); Chiang, JCH (Chiang, John C. H.); Kong, WW (Kong, Wenwen); Wu, ST (Wu, Shitou); Atwood, A (Atwood, Alyssa); Huang, JH (Huang, Junhua); Cheng, H (Cheng, Hai); Ning, YF (Ning, Youfeng); Xie, SC (Xie, Shucheng)

来源出版物: SCIENCE 卷: 362 期: 6414 特刊: SI 页: 580-+ DOI: 10.1126/science.aat9393 出版年: NOV 2 2018

Web of Science 核心合集中的 "被引频次": 58

被引频次合计: 74

摘要: Speleothem oxygen isotope records have revolutionized our understanding of the paleo East Asian monsoon, yet there is fundamental disagreement on what they represent in terms of the hydroclimate changes. We report a multiproxy speleothem record of monsoon evolution during the last deglaciation from the middle Yangtze region, which indicates a wetter central eastern China during North Atlantic cooling episodes, despite the oxygen isotopic record suggesting a weaker monsoon. We show that this apparent contradiction can be resolved if the changes are interpreted as a lengthening of the Meiyu rains and shortened post-Meiyu stage, in accordance with a recent hypothesis. Model simulations support this interpretation and further reveal the role of the westerlies in communicating the North Atlantic influence to the East Asian climate.

入藏号: WOS:000450460000045

PubMed ID: 30385577

出版商: AMER ASSOC ADVANCEMENT SCIENCE

出版商地址: 1200 NEW YORK AVE, NW, WASHINGTON, DC 20005 USA

Web of Science 类别: Multidisciplinary Sciences

ISSN: 0036-8075

eISSN: 1095-9203

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 131 条，共 381 条

标题: Reconstructing South China in Phanerozoic and Precambrian supercontinents

作者: Cawood, PA (Cawood, Peter A.); Zhao, GC (Zhao, Guochun); Yao, JL (Yao, Jinlong); Wang, W (Wang, Wei); Xu, YJ (Xu, Yajun); Wang, YJ (Wang, Yuejun)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 186 页: 173-194 DOI: 10.1016/j.earscirev.2017.06.001 出版年: NOV 2018

Web of Science 核心合集中的 "被引频次": 123

被引频次合计: 130

摘要: The history of the South China Craton and the constituent Yangtze and Cathaysia blocks are directly linked to Earth's Phanerozoic and Precambrian record of supercontinent assembly and dispersal. Exposed Archean rocks are limited to isolated fragments in the Yangtze Block that preserve a record of Meso- to Neo-Archean magmatism, sedimentation and metamorphism associated with a period of global craton formation and stabilization that corresponds with the assembly of the Kenor supercontinent/supercraton. However, there are insufficient data to link its history with other similar aged cratons. The tectonostratigraphic record in South China in the Paleoproterozoic, corresponding with the assembly of Nuna, suggests that rock units in the Yangtze Block were spatially linked with northwestern Laurentia and possibly Siberia, whereas Cathaysia was joined to northern India. During the formation of Rodinia at the end of the Mesoproterozoic through to that of Pangea in the mid-Paleozoic, Cathaysia remained joined to northern India. Early Neoproterozoic supra-subduction zone magmatic arc-back arc assemblages ranging in age from similar to 1000 Ma to 810 Ma occur within Cathaysia, along its northwestern margin, and along the southeastern margin of the Yangtze Block. These rocks provide a record of convergent plate interaction, which continued along the western margin of the Yangtze Block until around 700 Ma and correlates with similar along strike subduction zone magmatism in northwest India, Seychelles and Madagascar. During the final assembly of Gondwana in the early Paleozoic suturing of India-South China with the Western Australia-Mawson blocks along the Kuunga Orogen resulted in the accretion of the Sanya Block of Hainan Island with the rest of Cathaysia. The accretion of Laurussia to Gondwana in the mid-Paleozoic to form Pangea corresponds with the initiation of lithospheric extension along the northern margin of Gondwana and the separation of a number of continental blocks, including South China, which then drifted northward across the Paleo-Tethys to collide with the Asian segment of Pangea in the Permo-Triassic.

入藏号: WOS:000453642800008

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 132 条，共 381 条

标题: Closure of the East Paleotethyan Ocean and amalgamation of the Eastern Cimmerian and Southeast Asia continental fragments

作者: Wang, YJ (Wang, Yuejun); Qian, X (Qian, Xin); Cawood, PA (Cawood, Peter A.); Liu, HC (Liu, Huichuan); Feng, QL (Feng, Qinglai); Zhao, GC (Zhao, Guochun); Zhang, YH (Zhang, Yanhua); He, HY (He, Huiying); Zhang, PZ (Zhang, Peizhen)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 186 页: 195-230 DOI: 10.1016/j.earscirev.2017.09.013 出版年: NOV 2018

Web of Science 核心合集中的 "被引频次": 57

被引频次合计: 62

摘要: The Phanerozoic record of Southeast Asia preserves the history of opening and subsequent consumption of the Paleotethyan Ocean and the assembly of continental fragments into Asia as part of the broader-scale reconstruction of Pangea. However, uncertainty remains as to which of the many suture zones in Southeast Asia represents the relict of the main ocean, when final ocean closure occurred, and the assembly history of the Eastern Cimmerian and Southeast Asia continental fragments. Our overview of the geological features of the suture zones, the bounding continental fragments and their magmatic, metamorphic and sedimentary records resolves many of these key issues. The sedimentary, biogeographical, structural, lithological, geochemical and geochronological data from the Changning-Menglian, Inthanon and Bentong-Raub suture zones argue for their linkage with the Longmu Co-Shuanghu suture zone in Central Tibet, and together constitute the main East Paleotethyan Ocean relict. The eastward subduction of the ocean resulted in the development of a series of magmatic arc-back-arc basin and continental fragments in Southeast Asia, including, from west to east, the Lincang-Sukhothai-East Malaya arc, the Jinghong-Nan-Sa Kaeo back-arc basin, the Simao/west Indochina fragment, the Luang Prabang-Loei back-arc basin, the south Indochina fragment, the Wusu and Truong Son back arc basins, the north Indochina fragment, the Jinshajiang-Ailaoshan-Song Ma branch/back-arc basin and the South China Block. Assembly of these fragments resulted in Indosinian high temperature and high pressure metamorphism and related tectonothermal event. Available data indicate a switch from subduction of the main East Paleotethyan Ocean to the collision of the Sibumasu with Simao/Indochina blocks at similar to 237 Ma, with subsequent syn- and post-collisional events at similar to 237-230 Ma and similar to 230-200 Ma, respectively, along the Changning-Menglian, Inthanon and Bentong-Raub suture zones. The timing of initial-, syn- and post-collision events along the Jinshajiang-Ailaoshan-Song Ma suture zone with its record of back-arc basin closure is at similar to 247 Ma, similar to 247-237 Ma and similar to 237-200 Ma, generally similar to 10 Ma older than that along the Changning-Menglian, Inthanon and Bentong-Raub suture zones. Our synthesis of all available data enables establishment of a comprehensive geodynamic model for the East Paleotethyan evolution. This model links the spatial-temporal pattern across Southeast Asia into a series of tectonic events including ocean/back-arc basin opening, subduction/closure, subsequent assemblage and orogenic collapse, along with associated igneous, metamorphic and sedimentary activities.

入藏号: WOS:000453642800009

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 133 条，共 381 条

标题: A semi-supervised generative framework with deep learning features for high-resolution remote sensing image scene classification

作者: Han, W (Han, Wei); Feng, RY (Feng, Ruyi); Wang, LZ (Wang, Lizhe); Cheng, YF (Cheng, Yafan)

来源出版物: ISPRS JOURNAL OF PHOTOGRAMMETRY AND REMOTE SENSING 卷: 145 页: 23-43 DOI: 10.1016/j.isprsjprs.2017.11.004 子辑: A 出版年: NOV 2018

Web of Science 核心合集中的 "被引频次": 55

被引频次合计: 56

摘要: High resolution remote sensing (HRRS) image scene classification plays a crucial role in a wide range of applications and has been receiving significant attention. Recently, remarkable efforts have been made to develop a variety of approaches for HRRS scene classification, wherein deep-learning-based methods have achieved considerable performance in comparison with state-of-the-art methods. However, the deep-learning-based methods have faced a severe limitation that a great number of manually annotated HRRS samples are needed to obtain a reliable model. However, there are still not sufficient annotation datasets in the field of remote sensing. In addition, it is a challenge to get a large scale HRRS image dataset due to the abundant diversities and variations in HRRS images. In order to address the problem, we propose a semi-supervised generative framework (SSGF), which combines the deep learning features, a self-label technique, and a discriminative evaluation method to complete the task of scene classification and annotating datasets. On this basis, we further develop an extended algorithm (SSGA-E) and evaluate it by exclusive experiments. The experimental results show that the SSGA-E outperforms most of the fully-supervised methods and semi-supervised methods. It has achieved the third best accuracy on the UCM dataset, the second best accuracy on the WHU-RS, the NWPU-RESISC45, and the AID datasets. The impressive results demonstrate that the proposed SSGF and the extended method is effective to solve the problem of lacking an annotated HRRS dataset, which can learn valuable information from unlabeled samples to improve classification ability and obtain a reliable annotation dataset for supervised learning. (C) 2017 International Society for Photogrammetry and Remote Sensing, Inc. (ISPRS). Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000449125400003

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geography, Physical; Geosciences, Multidisciplinary; Remote Sensing; Imaging Science & Photographic Technology

ISSN: 0924-2716

eISSN: 1872-8235

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 134 条，共 381 条

标题: Strain energy density distribution of a tight gas sandstone reservoir in a low-amplitude tectonic zone and its effect on gas well productivity: A 3D FEM study

作者: Yin, S (Yin, Shuai); Zhao, JZ (Zhao, Jingzhou); Wu, ZH (Wu, Zhonghu); Ding, WL (Ding, Wenlong)

来源出版物: JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING 卷: 170 页: 89-104 DOI: 10.1016/j.petrol.2018.06.057 出版年: NOV 2018

Web of Science 核心合集中的 "被引频次": 49

被引频次合计: 49

摘要: The tight gas sandstone reservoirs in the Paleozoic of the Sulige gas field in China are highly heterogeneous, and fractures are key factors for stable reservoir production. Low-amplitude folds or nose-like structures are widely developed in the Upper Paleozoic strata in this area. To effectively predict gas well productivity, in this paper, a 3D FEM numerical simulation based on the deformation and energy variation of the rock mass was used to predict the " sweet spots" of gas well productivity in a tight gas sandstone reservoir using the He8 segment of the Middle Permian Xiashihezi Formation in the Central Sulige block as an example. The paleotectonic stress field of the study area during the maximum episode of compression in the Yanshanian movement was restored, and the two rupture parameters of the integrated rupture rate (IF) and strain energy density (U) were constructed. The strain energy density distribution has a high correlation with gas well productivity, indicating that it can better predict the rock rupture degree in low-amplitude tectonic zones. A complex relationship exists between the strain energy density distribution and low-amplitude folds. The high strain energy density zones are mainly distributed among the high positions and wing areas of the low-amplitude fold zone, but the top area of the low-amplitude fold does not necessarily have a high strain energy density. Portions of the high strain energy density zones are located in the gentle tectonic zone, located near but outside the low-amplitude fold zone. The strain energy in these gentle tectonic zones with a high strain energy density value is relatively high, and the rock mass is prone to rupture. This study is of great value in enriching the prediction of " sweet spots" in tight gas sandstone reservoirs in low-amplitude tectonic zones worldwide.

入藏号: WOS:000443829400009

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Energy & Fuels; Engineering, Petroleum

ISSN: 0920-4105

eISSN: 1873-4715

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 135 条，共 381 条

标题: Finite-Time H-infinity State Estimation for Discrete Time-Delayed Genetic Regulatory Networks Under Stochastic Communication Protocols

作者: Wan, XB (Wan, Xiongbo); Wang, ZD (Wang, Zidong); Han, QL (Han, Qing-Long); Wu, M (Wu, Min)

来源出版物: IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS I-REGULAR PAPERS 卷: 65 期: 10 页: 3481-3491 DOI: 10.1109/TCSI.2018.2815269 出版年: OCT 2018

Web of Science 核心合集中的 "被引频次": 64

被引频次合计: 63

摘要: This paper investigates the problem of finite-time H-infinity state estimation for discrete time-delayed genetic regulatory networks under stochastic communication protocols (SCPs). The network measurements are transmitted from two groups of sensors to a remote state estimator via two independent communication channels of limited bandwidths, and two SCPs are utilized to orchestrate the transmission orders of sensor nodes with aim to avoid data collisions. The estimation error dynamics is modeled by a Markovian switching system with two switching signals. By constructing a transmission-orderdependent Lyapunov-Krasovskii functional and utilizing an up-to-date discrete Wirtinger-based inequality together with the reciprocally convex approach, sufficient conditions are established to guarantee the stochastic finite-time boundedness for the estimation error dynamics with a prescribed H-infinity disturbance attenuation level. The parameters of the state estimator are designed by solving a convex optimization problem which minimizes the disturbance attenuation level subject to several inequality constraints. The repressilator model is utilized to illustrate the effectiveness of the design procedure of the proposed state estimator.

入藏号: WOS:000444025900031

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Engineering, Electrical & Electronic

ISSN: 1549-8328

eISSN: 1558-0806

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 136 条，共 381 条

标题: Rapid transition from continental breakup to igneous oceanic crust in the South China Sea

作者: Larsen, HC (Larsen, H. C.); Mohn, G (Mohn, G.); Nirrengarten, M (Nirrengarten, M.); Sun, Z (Sun, Z.); Stock, J (Stock, J.); Jian, Z (Jian, Z.); Klaus, A (Klaus, A.); Alvarez-Zarikian, CA (Alvarez-Zarikian, C. A.); Boaga, J (Boaga, J.); Bowden, SA (Bowden, S. A.); Briais, A (Briais, A.); Chen, Y (Chen, Y.); Cukur, D (Cukur, D.); Dadd, K (Dadd, K.); Ding, W (Ding, W.); Dorais, M (Dorais, M.); Ferre, EC (Ferre, E. C.); Ferreira, F (Ferreira, F.); Furusawa, A (Furusawa, A.); Gewecke, A (Gewecke, A.); Hinojosa, J (Hinojosa, J.); Hofig, TW (Hofig, T. W.); Hsiung, KH (Hsiung, K. H.); Huang, B (Huang, B.); Huang, E (Huang, E.); Huang, XL (Huang, X. L.); Jiang, S (Jiang, S.); Jin, H (Jin, H.); Johnson, BG (Johnson, B. G.); Kurzawski, RM (Kurzawski, R. M.); Lei, C (Lei, C.); Li, B (Li, B.); Li, L (Li, L.); Li, Y (Li, Y.); Lin, J (Lin, J.); Liu, C (Liu, C.); Liu, Z (Liu, Z.); Luna, AJ (Luna, A. J.); Lupi, C (Lupi, C.); McCarthy, A (McCarthy, A.); Ningthoujam, L (Ningthoujam, L.); Osono, N (Osono, N.); Peate, DW (Peate, D. W.); Persaud, P (Persaud, P.); Qiu, N (Qiu, N.); Robinson, C (Robinson, C.); Satolli, S (Satolli, S.); Sauermilch, I (Sauermilch, I); Schindlbeck, JC (Schindlbeck, J. C.); Skinner, S (Skinner, S.); Straub, S (Straub, S.); Su, X (Su, X.); Su, C (Su, C.); Tian, L (Tian, L.); Van Der Zwan, FM (Van Der Zwan, F. M.); Wan, S (Wan, S.); Wu, H (Wu, H.); Xiang, R (Xiang, R.); Yadav, R (Yadav, R.); Yi, L (Yi, L.); Yu, PS (Yu, P. S.); Zhang, C (Zhang, C.); Zhang, J (Zhang, J.); Zhang, Y (Zhang, Y.); Zhao, N (Zhao, N.); Zhong, G (Zhong, G.); Zhong, L (Zhong, L.)

来源出版物: NATURE GEOSCIENCE 卷: 11 期: 10 页: 782-+ DOI: 10.1038/s41561-018-0198-1 出版年: OCT 2018

Web of Science 核心合集中的 "被引频次": 57

被引频次合计: 64

摘要: Continental breakup represents the successful process of rifting and thinning of the continental lithosphere, leading to plate rupture and initiation of oceanic crust formation. Magmatism during breakup seems to follow a path of either excessive, transient magmatism (magma-rich margins) or of igneous starvation (magma-poor margins). The latter type is characterized by extreme continental lithospheric extension and mantle exhumation prior to igneous oceanic crust formation. Discovery of magma-poor margins has raised fundamental questions about the onset of ocean-floor type magmatism, and has guided interpretation of seismic data across many rifted margins, including the highly extended northern South China Sea margin. Here we report International Ocean Discovery Program drilling data from the northern South China Sea margin, testing the magma-poor margin model outside the North Atlantic. Contrary to expectations, results show initiation of Mid-Ocean Ridge basalt type magmatism during breakup, with a narrow and rapid transition into igneous oceanic crust. Coring and seismic data suggest that fast lithospheric extension without mantle exhumation generated a margin structure between the two endmembers. Asthenospheric upwelling yielding Mid-Ocean Ridge basalt-type magmatism from normal-temperature mantle during final breakup is interpreted to reflect rapid rifting within thin pre-rift lithosphere.

入藏号: WOS:000446089100018

出版商: NATURE PUBLISHING GROUP

出版商地址: 75 VARICK ST, 9TH FLR, NEW YORK, NY 10013-1917 USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1752-0894

eISSN: 1752-0908

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 137 条，共 381 条

标题: Fe, Cu-Coordinated ZIF-Derived Carbon Framework for Efficient Oxygen Reduction Reaction and Zinc-Air Batteries

作者: Wang, ZH (Wang, Zhihao); Jin, HH (Jin, Huihui); Meng, T (Meng, Tian); Liao, K (Liao, Ke); Meng, WQ (Meng, Wenqian); Yang, JL (Yang, Jinlong); He, DP (He, Daping); Xiong, YL (Xiong, Yuli); Mu, SC (Mu, Shichun)

来源出版物: ADVANCED FUNCTIONAL MATERIALS 卷: 28 期: 39 文献号: 1802596 DOI: 10.1002/adfm.201802596 出版年: SEP 26 2018

Web of Science 核心合集中的 "被引频次": 133

被引频次合计: 134

摘要: Zeolitic imidazole frameworks (ZIFs) offer rich platforms for rational design and construction of high-performance nonprecious-metal oxygen reduction reaction (ORR) catalysts owing to their flexibility, hierarchical porous structures, and high surface area. Herein, an Fe, Cu-coordinated ZIF-derived carbon framework (Cu@Fe-N-C) with a well-defined morphology of truncated rhombic dodecahedron is facilely prepared by introducing Fe2+ and Cu2+ during the growth of ZIF-8, followed by pyrolysis. The obtained Cu@Fe-N-C, with bimetallic active sites, large surface area, high nitrogen doping level, and conductive carbon frameworks, exhibits excellent ORR performance. It displays 50 mV higher half-wave potential (0.892 V) than that of Pt catalysts in an alkaline medium and comparable performance to Pt catalysts in an acidic medium. In addition, it also has excellent durability and methanol resistance ability in both acidic and alkaline solutions, which makes it one of the best Pt-free catalysts reported to date for ORR. Impressively, when being employed as a cathode catalyst in zinc-air batteries, Cu@Fe-N-C presents a higher peak power density of 92 mW cm(-2) than that of Pt/C (74 mW cm(-2)) as well as excellent durability.

入藏号: WOS:000445327300010

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary; Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied; Physics, Condensed Matter

ISSN: 1616-301X

eISSN: 1616-3028

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 138 条，共 381 条

标题: Activation of amorphous Bi2WO6 with synchronous Bi metal and Bi2O3 coupling: Photocatalysis mechanism and reaction pathway

作者: He, WJ (He, Wenjie); Sun, YJ (Sun, Yanjun); Jiang, GM (Jiang, Guangming); Huang, HW (Huang, Hongwei); Zhang, XM (Zhang, Xianming); Dong, F (Dong, Fan)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 232 页: 340-347 DOI: 10.1016/j.apcatb.2018.03.047 出版年: SEP 15 2018

Web of Science 核心合集中的 "被引频次": 83

被引频次合计: 86

摘要: Amorphous semiconductors usually suffer from low photocatalysis efficiency due to the fast charge recombination rate. In this work, to activate the amorphous Bi2WO6, Bi2O3 and Bi particles were in sequence deposited over its surface via a facile in situ chemical reduction of amorphous Bi2WO6 by NaBH4 at room temperature. In the resultant ternary Bi/Bi2O3/Bi2WO6, the well-formed heterojunctions (i.e. Bi-Bi2O3 and Bi2O3-Bi2WO6) and the surface plasmon resonance effect of Bi both contribute to an increase in charge carrier concentration, an efficient e(-)/h(+) separation and then an enhanced visible light photocatalytic performance. The molar ratio of Bi, Bi2O3 and Bi2WO6 in composite can be modulated by the dosage of NaBH4, and consequently the amount of each heterojunction (i.e. Bi/Bi2O3 or Bi2O3/Bi2WO6) as well as the intensity of SPR effect could be tuned. The photocatalytic NO removal test under visible light irradiation shows that BWO-0.8 (0.8 denotes the molar ratio of NaBH4 to Bi2WO6) presents a maximum NO removal efficiency of 55.4%, much higher than that of the pristine amorphous Bi2WO6 (10%). The enhanced activity can be attributed to the balanced SPR effect of Bi metal and the heterojunction effect, making their overall contribution maximized. The pathway study of photocatalytic NO oxidation by in situ FT-IR suggests that NO is converted to nitrates adsorbed over the catalyst surface. The present work could provide a new approach to activate the amorphous semiconductors for efficient visible light photocatalysis.

入藏号: WOS:000434004300037

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 139 条，共 381 条

标题: All-inorganic perovskite nanocrystal scintillators

作者: Chen, QS (Chen, Qiushui); Wu, J (Wu, Jing); Ou, XY (Ou, Xiangyu); Huang, BL (Huang, Bolong); Almutlaq, J (Almutlaq, Jawaher); Zhumekenov, AA (Zhumekenov, Ayan A.); Guan, XW (Guan, Xinwei); Han, SY (Han, Sanyang); Liang, LL (Liang, Liangliang); Yi, ZG (Yi, Zhigao); Li, J (Li, Juan); Xie, XJ (Xie, Xiaoji); Wang, Y (Wang, Yu); Li, Y (Li, Ying); Fan, DY (Fan, Dianyuan); Teh, DBL (Teh, Daniel B. L.); All, AH (All, Angelo H.); Mohammed, OF (Mohammed, Omar F.); Bakr, OM (Bakr, Osman M.); Wu, T (Wu, Tom); Bettinelli, M (Bettinelli, Marco); Yang, HH (Yang, Huanghao); Huang, W (Huang, Wei); Liu, XG (Liu, Xiaogang)

来源出版物: NATURE 卷: 561 期: 7721 页: 88-93 DOI: 10.1038/s41586-018-0451-1 出版年: SEP 6 2018

Web of Science 核心合集中的 "被引频次": 282

被引频次合计: 290

摘要: The rising demand for radiation detection materials in many applications has led to extensive research on scintillators(1-3). The ability of a scintillator to absorb high-energy (kiloelectronvolt-scale) X-ray photons and convert the absorbed energy into low-energy visible photons is critical for applications in radiation exposure monitoring, security inspection, X-ray astronomy and medical radiography(4,5). However, conventional scintillators are generally synthesized by crystallization at a high temperature and their radioluminescence is difficult to tune across the visible spectrum. Here we describe experimental investigations of a series of all-inorganic perovskite nanocrystals comprising caesium and lead atoms and their response to X-ray irradiation. These nanocrystal scintillators exhibit strong X-ray absorption and intense radioluminescence at visible wavelengths. Unlike bulk inorganic scintillators, these perovskite nanomaterials are solution-processable at a relatively low temperature and can generate X-ray-induced emissions that are easily tunable across the visible spectrum by tailoring the anionic component of colloidal precursors during their synthesis. These features allow the fabrication of flexible and highly sensitive X-ray detectors with a detection limit of 13 nanograys per second, which is about 400 times lower than typical medical imaging doses. We show that these colour-tunable perovskite nanocrystal scintillators can provide a convenient visualization tool for X-ray radiography, as the associated image can be directly recorded by standard digital cameras. We also demonstrate their direct integration with commercial flat-panel imagers and their utility in examining electronic circuit boards under low-dose X-ray illumination.

入藏号: WOS:000443755200037

PubMed ID: 30150772

出版商: NATURE PUBLISHING GROUP

出版商地址: MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

Web of Science 类别: Multidisciplinary Sciences

ISSN: 0028-0836

eISSN: 1476-4687

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16

第 140 条，共 381 条

标题: Delineating multi-scenario urban growth boundaries with a CA-based FLUS model and morphological method

作者: Liang, X (Liang, Xun); Liu, XP (Liu, Xiaoping); Li, X (Li, Xia); Chen, YM (Chen, Yimin); Tian, H (Tian, He); Yao, Y (Yao, Yao)

来源出版物: LANDSCAPE AND URBAN PLANNING 卷: 177 页: 47-63 DOI: 10.1016/j.landurbplan.2018.04.016 出版年: SEP 2018

Web of Science 核心合集中的 "被引频次": 60

被引频次合计: 75

摘要: Urban growth boundaries (UGBs) have been commonly regarded as a useful tool for controlling urban sprawl. There is a need to create models that can establish plausible UGBs for fast growing regions. Previous methods have merely focused on establishing a single UGB scenario over different time intervals, but rarely considered the influences of macro policy (e.g., future urban demand) and spatial policy (e.g., master plan) for regional planning. However, the spatial patterns of urban expansion are significantly affected by regional planning. In this paper, a CA-based method called the future land use simulation (FLUS) is applied to the delineation of UGBs. We argue that the delineation needs to integrate the top-down approach with CA for projecting complex land use changes under designed scenarios. The system dynamics model (SD) and cellular automaton model (CA) were interactively coupled in the FLUS model during the projection period. The top-down SD is used to project scenarios that relate to macro policy and socioeconomic status, and the bottom-up CA accounts for urban growth simulations under the influence of different driving factors and spatial planning policies. A morphological technology based on erosion and dilation is further proposed to generate the UGBs from the FLUS model's simulated urban forms. The proposed UGB-FLUS model was applied to the establishment of UGBs in the Pearl River Delta region (PRD) from 2020 to 2050. The results demonstrate that the method can support urban planning by generating feasible patterns for UGBs under different planning scenarios.

入藏号: WOS:000437967500005

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Ecology; Environmental Studies; Geography; Geography, Physical; Regional & Urban Planning; Urban Studies

ISSN: 0169-2046

eISSN: 1872-6062

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 141 条，共 381 条

标题: A Survey on Energy Internet: Architecture, Approach, and Emerging Technologies

作者: Wang, K (Wang, Kun); Yu, J (Yu, Jun); Yu, Y (Yu, Yan); Qian, YR (Qian, Yirou); Zeng, DZ (Zeng, Deze); Guo, S (Guo, Song); Xiang, Y (Xiang, Yong); Wu, JS (Wu, Jinsong)

来源出版物: IEEE SYSTEMS JOURNAL 卷: 12 期: 3 页: 2403-2416 DOI: 10.1109/JSYST.2016.2639820 出版年: SEP 2018

Web of Science 核心合集中的 "被引频次": 89

被引频次合计: 89

摘要: Energy crisis and carbon emission have become two seriously concerned issues universally. As a feasible solution, Energy Internet (EI) has aroused global concern once proposed. EI is a new power generation developing a vision of evolution of smart grids into the Internet. The communication infrastructure is an essential component to the implementation of EI. A scalable and permanent communication infrastructure is crucial in both construction and operation of EI. In this paper, we present an introduction and the motivation to the evolution from smart grid to EI. We also introduce a representative EI architecture, i.e., the future renewable electric energy delivery and management system. Four critical EI features are emphasized. Then, we summarize the essential requirements that EI systems have to meet. With several key supporting technologies, EI shall realize the optimal utilization of highly scalable and distributed green energy resources, so that the situation of severe energy source crisis and carbon emission can be efficiently relieved. Since an EI system might have extensively distributed consumers and devices, the guarantee of its reliability and security is extremely significant. The further specific exploration for challenges, including reliability and security, will be stated in this paper.

入藏号: WOS:000443049900036

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Computer Science, Information Systems; Engineering, Electrical & Electronic; Operations Research & Management Science; Telecommunications

ISSN: 1932-8184

eISSN: 1937-9234

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 142 条，共 381 条

标题: One-step synthesis of nanostructured g-C3N4/TiO2 composite for highly enhanced visible-light photocatalytic H-2 evolution

作者: Tan, YG (Tan, Yigen); Shu, Z (Shu, Zhu); Zhou, J (Zhou, Jun); Li, TT (Li, Tiantian); Wang, WB (Wang, Wenbin); Zhao, ZL (Zhao, Zhengliang)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 230 页: 260-268 DOI: 10.1016/j.apcatb.2018.02.056 出版年: AUG 15 2018

Web of Science 核心合集中的 "被引频次": 174

被引频次合计: 174

摘要: Improving the photocatalytic property of g-C3N4 by combined strategies has attracted increasing attention recently. In this work, we realized the structure nanosizing of g-C3N4 and its synchronous compounding with TiO2 nanoparticles in one step, using a facile melamine-involved vapor deposition method coupled with a simple and easy setup. Nanostructured g-C3N4/TiO2 heterojunction was well-established and the resultant nanocomposite demonstrated an excellent visible-light photocatalytic H-2 evolution performance 10.8 times higher than that of bulk g-C3N4. The structure nanosizing coupled with the heterojunction construction contributed together to the improvement of photoinduced electron-hole separation and final photocatalytic efficiency. The proposed simple method and setup have the potential to be used for preparing other g-C3N4-based nanocomposites with advanced photocatalytic properties.

入藏号: WOS:000429500100026

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 143 条，共 381 条

标题: Transition metal catalyzed sulfite auto-oxidation systems for oxidative decontamination in waters: A state-of-the-art minireview

作者: Zhou, DN (Zhou, Danna); Chen, L (Chen, Long); Li, JJ (Li, Jinjun); Wu, F (Wu, Feng)

来源出版物: CHEMICAL ENGINEERING JOURNAL 卷: 346 页: 726-738 DOI: 10.1016/j.cej.2018.04.016 出版年: AUG 15 2018

Web of Science 核心合集中的 "被引频次": 61

被引频次合计: 65

摘要: Sulfate radical (SO4 (.-)) is believed to be one of the most highly reactive oxidants, as superior as hydroxyl radical (HO.), for various organic/inorganic contaminants removal in the field of pollution control chemistry. In the recent decade, sulfate radical-based advanced oxidation processes (SR-AOPs) have been developed quickly primarily due to the selective oxidation and high oxidative potential and therefore hold great promises. Although peroxydisulfate (PDS) and peroxymonosulfate (PMS) have been extensively utilized in various SR-AOPs, new attempts have been made to replace PDS/PMS with sulfite for the purpose of SO4.- generation at lower cost. Indeed, some significant progresses have been achieved in driving SO4.- generation from transient metal catalyzed sulfite auto-oxidation systems to oxidize contaminants. The background, basic mechanisms, and application of the transition metal catalyzed sulfite auto-oxidation systems in contaminants detoxification and microorganism inactivation are reviewed in this work. Meanwhile, we hereby also want to point out several important unresolved issues for future investigation. (1) How to realize quick reactions at near neutral pH? (2) How to achieve high rate of mineralization as equally as or at least close to the apparent complete elimination of substrates? (3) What are the relative contributions of various oxysulfur radicals to the transformation of contaminants. (4) Is it possible to control the extent of substrates oxidation so as to get target transformed products with desired properties? If so, SR-AOPs can be upgraded as product-oriented AOPs (PO-AOPs). This state-of-art minireview aims to discuss abovementioned issues and presents some recent progresses in this field.

入藏号: WOS:000432878400072

出版商: ELSEVIER SCIENCE SA

出版商地址: PO BOX 564, 1001 LAUSANNE, SWITZERLAND

Web of Science 类别: Engineering, Environmental; Engineering, Chemical

ISSN: 1385-8947

eISSN: 1873-3212

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 144 条，共 381 条

标题: SuperPCA: A Superpixelwise PCA Approach for Unsupervised Feature Extraction of Hyperspectral Imagery

作者: Jiang, JJ (Jiang, Junjun); Ma, JY (Ma, Jiayi); Chen, C (Chen, Chen); Wang, ZY (Wang, Zhongyuan); Cai, ZH (Cai, Zhihua); Wang, LZ (Wang, Lizhe)

来源出版物: IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING 卷: 56 期: 8 页: 4581-4593 DOI: 10.1109/TGRS.2018.2828029 出版年: AUG 2018

Web of Science 核心合集中的 "被引频次": 75

被引频次合计: 77

摘要: As an unsupervised dimensionality reduction method, the principal component analysis (PCA) has been widely considered as an efficient and effective preprocessing step for hyperspectral image (HSI) processing and analysis tasks. It takes each band as a whole and globally extracts the most representative hands. However, different homogeneous regions correspond to different objects, whose spectral features are diverse. Therefore, it is inappropriate to carry out dimensionality reduction through a unified projection for an entire HSI. In this paper, a simple but very effective superpixelwise PCA (SuperPCA) approach is proposed to learn the intrinsic low-dimensional features of HSIs. In contrast to classical PCA models, the SuperPCA has four main properties: 1) unlike the traditional PCA method based on a whole image, the SuperPCA takes into account the diversity in different homogeneous regions, that is, different regions should have different projections; 2) most of the conventional feature extraction models cannot directly use the spatial information of HSIs, while the SuperPCA is able to incorporate the spatial context information into the unsupervised dimensionality reduction by superpixel segmentation; 3) since the regions obtained by superpixel segmentation have homogeneity, the SuperPCA can extract potential low-dimensional features even under noise; and 4) although the SuperPCA is an unsupervised method, it can achieve a competitive performance when compared with supervised approaches. The resulting features are discriminative, compact, and noise-resistant, leading to an improved HSI classification performance. Experiments on three public data sets demonstrate that the SuperPCA model significantly outperforms the conventional PCA-based dimensionality reduction baselines for HSI classification, and some state-of-the-art feature extraction approaches. The MATLAB source code is available at https://github.com/junjun-jiang/SuperPCA.

入藏号: WOS:000439980200023

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Geochemistry & Geophysics; Engineering, Electrical & Electronic; Remote Sensing; Imaging Science & Photographic Technology

ISSN: 0196-2892

eISSN: 1558-0644

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 145 条，共 381 条

标题: Emerging Pt-based electrocatalysts with highly open nanoarchitectures for boosting oxygen reduction reaction

作者: Li, CL (Li, Cuiling); Tan, HB (Tan, Haibo); Lin, JJ (Lin, Jianjian); Luo, XL (Luo, Xiliang); Wang, SP (Wang, Shengping); You, J (You, Jungmok); Kang, YH (Kang, Yong-Hook); Bando, Y (Bando, Yoshio); Yamauchi, Y (Yamauchi, Yusuke); Kim, J (Kim, Jeonghun)

来源出版物: NANO TODAY 卷: 21 页: 91-105 DOI: 10.1016/j.nantod.2018.06.005 出版年: AUG 2018

Web of Science 核心合集中的 "被引频次": 158

被引频次合计: 159

摘要: Developing highly efficient and stable platinum (Pt)-based electrocatalysts for oxygen reduction reaction (ORR) is the most essential step toward the commercialization of fuel cells. Highly accessible reactive surfaces play a key role in boosting ORR for superior fuel cell performance due to the adequate exposure of the active surfaces and the feasible mass transport. Herein, we begin with a brief introduction to the design principles for an effective ORR electrocatalyst, which could plausibly possess high activity and durability at the same time. Corresponding with the requirements, the recent progress of rational design based on nanoarchitecture, synthesis, and electrochemical performances of Pt -based electrocatalysts with open construction is reviewed and explained accordingly. (C) 2018 Elsevier Ltd. All rights reserved.

入藏号: WOS:000442332900011

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Chemistry, Multidisciplinary; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary

ISSN: 1748-0132

eISSN: 1878-044X

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 146 条，共 381 条

标题: Late inception of a resiliently oxygenated upper ocean

作者: Lu, WY (Lu, Wanyi); Ridgwell, A (Ridgwell, Andy); Thomas, E (Thomas, Ellen); Hardisty, DS (Hardisty, Dalton S.); Luo, G (Luo, Genming); Algeo, TJ (Algeo, Thomas J.); Saltzman, MR (Saltzman, Matthew R.); Gill, BC (Gill, Benjamin C.); Shen, YN (Shen, Yanan); Ling, HF (Ling, Hong-Fei); Edwards, CT (Edwards, Cole T.); Whalen, MT (Whalen, Michael T.); Zhou, XL (Zhou, Xiaoli); Gutchess, KM (Gutchess, Kristina M.); Jin, L (Jin, Li); Rickaby, REM (Rickaby, Rosalind E. M.); Jenkyns, HC (Jenkyns, Hugh C.); Lyons, TW (Lyons, Timothy W.); Lenton, TM (Lenton, Timothy M.); Kump, LR (Kump, Lee R.); Lu, ZL (Lu, Zunli)

来源出版物: SCIENCE 卷: 361 期: 6398 页: 174-177 DOI: 10.1126/science.aar5372 出版年: JUL 13 2018

Web of Science 核心合集中的 "被引频次": 57

被引频次合计: 57

摘要: Rising oceanic and atmospheric oxygen levels through time have been crucial to enhanced habitability of surface Earth environments. Few redox proxies can track secular variations in dissolved oxygen concentrations around threshold levels for metazoan survival in the upper ocean. We present an extensive compilation of iodine-to-calcium ratios (I/Ca) in marine carbonates. Our record supports a major rise in the partial pressure of oxygen in the atmosphere at similar to 400 million years (Ma) ago and reveals a step change in the oxygenation of the upper ocean to relatively sustainable near-modern conditions at similar to 200 Ma ago. An Earth system model demonstrates that a shift in organic matter remineralization to greater depths, which may have been due to increasing size and biomineralization of eukaryotic plankton, likely drove the I/Ca signals at similar to 200 Ma ago.

入藏号: WOS:000438449200044

PubMed ID: 29853552

出版商: AMER ASSOC ADVANCEMENT SCIENCE

出版商地址: 1200 NEW YORK AVE, NW, WASHINGTON, DC 20005 USA

Web of Science 类别: Multidisciplinary Sciences

ISSN: 0036-8075

eISSN: 1095-9203

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 147 条，共 381 条

标题: Experimental study on spontaneous imbibition of recycled fracturing flow-back fluid to enhance oil recovery in low permeability sandstone reservoirs

作者: You, Q (You, Qing); Wang, H (Wang, Huan); Zhang, Y (Zhang, Yan); Liu, YF (Liu, Yifei); Fang, JC (Fang, Jichao); Dai, CL (Dai, Caili)

来源出版物: JOURNAL OF PETROLEUM SCIENCE AND ENGINEERING 卷: 166 页: 375-380 DOI: 10.1016/j.petrol.2018.03.058 出版年: JUL 2018

Web of Science 核心合集中的 "被引频次": 68

被引频次合计: 70

摘要: In light of the high treatment costs for massive amounts of fracturing flow-back fluid and its harmfulness to the environment, a novel method of recycled fracturing flow-back fluid (RFFF) to enhance oil recovery by spontaneous imbibition is proposed in this study; this method does not allow the flow-back fluid back to the ground, thereby preventing negative impacts. The wettability alteration and interfacial tension (IFT) can effectively strengthen the spontaneous imbibition to enhance oil recovery in low-permeability sandstone reservoirs. This study combines the effects of wettability alteration and IFT with the use of the RFFF, which is composed of viscoelastic surfactants, on the spontaneous imbibition in low-permeability outcrop cores. Contact angle (CA) experiments, IFT experiments, and spontaneous imbibition experiments are conducted. The CA and IFT experimental results showed that the RFFF solutions changed the wettability of the core surface from oil-wet to waterwet and easily reduced the IFT between the crude oil and the RFFF solution to 10(-3)-10(-2) mN/m, which improved the oil recovery by changing the capillary forces. The spontaneous imbibition results showed that the RFFF solutions at concentrations of 0.03 - 0.10 wt% resulted in a higher imbibition recovery due to the synergistic effect of the wettability alteration and the IFT, which was attributed to the wedge film structure and the spreading force. It can be concluded that the use of the RFFF has the potential to further enhance oil recovery after fracturing the formation in low-permeability reservoirs without letting the fluid flow back to the ground. The proposed method is multi-functional and does not only improve the oil recovery by integrating fracturing and displacement methods but also reduces the costs of reservoir development and protects the environment.

入藏号: WOS:000432869500035

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Energy & Fuels; Engineering, Petroleum

ISSN: 0920-4105

eISSN: 1873-4715

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 148 条，共 381 条

标题: Structural geometry of orogenic gold deposits: Implications for exploration of world-class and giant deposits

作者: Groves, DI (Groves, David I.); Santosh, M (Santosh, M.); Goldfarb, RJ (Goldfarb, Richard J.); Zhang, L (Zhang, Liang)

来源出版物: GEOSCIENCE FRONTIERS 卷: 9 期: 4 特刊: SI 页: 1163-1177 DOI: 10.1016/j.gsf.2018.01.006 出版年: JUL 2018

Web of Science 核心合集中的 "被引频次": 57

被引频次合计: 62

摘要: With very few exceptions, orogenic gold deposits formed in subduction-related tectonic settings in accretionary to collisional orogenic belts from Archean to Tertiary times. Their genesis, including metal and fluid source, fluid pathways, depositional mechanisms, and timing relative to regional structural and metamorphic events, continues to be controversial. However, there is now general agreement that these deposits formed from metamorphic fluids, either from metamorphism of intra-basinal rock sequences or de-volatilization of a subducted sediment wedge, during a change from a compressional to transpressional, less commonly transtensional, stress regime, prior to orogenic collapse. In the case of Archean and Paleoproterozoic deposits, the formation of orogenic gold deposits was one of the last events prior to cratonization. The late timing of orogenic gold deposits within the structural evolution of the host orogen implies that any earlier structures may be mineralized and that the current structural geometry of the gold deposits is equivalent to that at the time of their formation provided that there has been no significant post-gold orogenic overprint. Within the host volcano-sedimentary sequences at the province scale, world-class orogenic gold deposits are most commonly located in second-order structures adjacent to crustal scale faults and shear zones, representing the first-order ore-forming fluid pathways, and whose deep lithospheric connection is marked by lamprophyre intrusions which, however, have no direct genetic association with gold deposition. More specifically, the gold deposits are located adjacent to similar to 10 degrees-25 degrees district-scale jogs in these crustal-scale faults. These jogs are commonly the site of arrays of similar to 70 degrees cross faults that accommodate the bending of the more rigid components, for example volcanic rocks and intrusive sills, of the host belts. Rotation of blocks between these accommodation faults causes failure of more competent units and/or reactivation and dilation of pre-existing structures, leading to deposit-scale focussing of ore-fluid and gold deposition. Anticlinal or antiformal fold hinges, particularly those of 'locked-up' folds with similar to 30 degrees apical angles and overturned back limbs, represent sites of brittle-ductile rock failure and provide one of the more robust parameters for location of orogenic gold deposits.

In orogenic belts with abundant pre-gold granitic intrusions, particularly Precambrian granitegreenstone terranes, the boundaries between the rigid granitic bodies and more ductile greenstone sequences are commonly sites of heterogeneous stress and inhomogeneous strain. Thus, contacts between granitic intrusions and volcano-sedimentary sequences are common sites of ore-fluid infiltration and gold deposition. For orogenic gold deposits at deeper crustal levels, ore-forming fluids are commonly focused along strain gradients between more compressional zones where volcano-sedimentary sequences are thinned and relatively more extensional zones where they are thickened. World-class orogenic gold deposits are commonly located in the deformed volcano-sedimentary sequences in such strain gradients adjacent to triple-point junctions defined by the granitic intrusions, or along the zones of assembly of micro-blocks on a regional scale. These repetitive province to district-scale geometrical patterns of structures within the orogenic belts are clearly critical parameters in geology-based exploration targeting for orogenic gold deposits. (C) 2018, China University of Geosciences (Beijing) and Peking University. Production and hosting by Elsevier B.V.

入藏号: WOS:000436515800015

出版商: CHINA UNIV GEOSCIENCES, WUHAN

出版商地址: 388 LIMO RD, WUHAN, CHINA MAINLAND 430074, PEOPLES R CHINA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1674-9871

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 149 条，共 381 条

标题: Neoarchean-Paleoproterozoic terrane assembly and Wilson cycle in the North China Craton: an overview from the central segment of the Trans North China Orogen

作者: Tang, L (Tang, Li); Santosh, M (Santosh, M.)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 182 页: 1-27 DOI: 10.1016/j.earscirev.2018.04.010 出版年: JUL 2018

Web of Science 核心合集中的 "被引频次": 57

被引频次合计: 59

摘要: The North China Craton (NCC) is one of the important Precambrian nuclei of the globe as well as an integral component of the Paleoproterozoic supercontinent Columba. The NCC is considered in popular models as an assembly of two major crustal blocks, the Eastern and Western Blocks, which were sutured along the Trans-North China Orogen (TNCO), which represents a major Paleoproterozoic collisional orogen. The central segment of the TNCO preserves important keys to unravel the tectonic history of amalgamation and cratonization of the NCC. Here we present an overview on the lithology, geochemistry, geochronology, Lu-Hf isotopes and metamorphic history of the Neoarchean to Paleoproterozoic rocks in the major basement terranes from the central segment of the TNCO. The available data allow us to re-construct the major Precambrian events from the heart of the NCC as follows. (1) 2.58-2.48 Ga: amalgamation of three microblocks (Ordos, Qianhuai and Xuchang) along the Wutai granite-greenstone belt and its branch at the Zanhuang area, together with the convergence of major micro blocks along other -2.5 Ga granite-greenstone belts leading to the initial cratonization of the NCC. (2) 2.50-2.45 Ga: post-collisional extension as represented by undeformed mafic dykes and granitoid dykes or plutons, resulting in the opening of an oceanic basin along the Hengshan and Huai'an-Xuanhua Complexes. (3) 2.45-2.12 Ga: subduction in the Hengshan, Hual'an-Xuanhua and Luliang Complexes, and simultaneous rifting in the Fuping, Wutai and Zanhuang Complexes. (4) 2.12-1.98 Ga: opening of oceanic basins in the Wutai and Fuping areas followed by double subduction of the oceanic lithosphere and arc magmatism in the Fuping, Wutai and Ltiliang Complexes, with coeval rifting in the northern part as represented by the Hengshan and Huai'anXuanhua Complexes and the southern side as represented by the Zanhuang Complex. (5) 1.96-1.80 Ga: the assembly of the separated terranes (or complexes) driven by the amalgamation of the Western and Eastern Blocks. The collisional event may have occurred at 1.96-1.90 Ga, and the 1.88-1.80 Ga metamorphic ages might represent the retrograde cooling during exhumation. (6) Termination of the collisional event represented by post-collisional intrusions of granitoids, charnockites and pegmatites until ca. 1.74 Ga. Thus the central segment of the TNCO records a prolonged Wilson cycle following the initial cratonization of the NCC during Neoarchean, and involved multiple rift-subduction and collisional processes in the Paleoproterozoic resulting in the unified NCC and its incorporation into the supercontinent Columbia.

入藏号: WOS:000436222700001

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 150 条，共 381 条

标题: Crustal architecture and metallogenesis in the south-eastern North China Craton

作者: Deng, J (Deng, Jun); Wang, CM (Wang, Changming); Bagas, L (Bagas, Leon); Santosh, M (Santosh, M.); Yao, EY (Yao, Enya)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 182 页: 251-272 DOI: 10.1016/j.earscirev.2018.05.001 出版年: JUL 2018

Web of Science 核心合集中的 "被引频次": 67

被引频次合计: 73

摘要: The south-eastern part of the North China Craton (NCC), the major historical source of gold supply to the former Emperors of China, continues to be a potential target for gold exploration. With a view to gain insights on the crustal architecture and gold metallogeny of this region, this contribution combines geological and Nd-Hf-isotopic data from magmatic rocks associated with the ore mineralisation. We integrate Nd-Hf isotopic data from published works as a tool to present isotopic maps. These maps highlight the location of major tectonic structures, and their relationship with the distribution of mineral deposits in the south-eastern NCC. The porphyry and porphyry-skam Cu(-Au-Mo) deposits in the Luxi area in eastern NCC are associated with magmatic rocks and are located in zones with variable epsilon Nd-epsilon Hf values and T-DM(c)-T-DM(2) ages representing dominant Paleoproterozoic to Mesoproterozoic and reworked crustal components with minor mantle material. In contrast, the Jiaodong type Au and porphyry-skam Mo(-W-Cu) deposits are associated with magmatic rocks emplaced in domains with low-epsilon Nd-epsilon Hf values and older T-DM(c)-T-DM(2) ages characterised by dominantly Archean-Paleoproterozoic reworked crustal components in the Jiaobei Terrane and the Sulu Orogen. Our study thus demarcates distinct crustal provinces and source components in generating some of the world-class gold deposits.

入藏号: WOS:000436222700013

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 151 条，共 381 条

标题: A Modified Multistable Chaotic Oscillator

作者: Wei, ZC (Wei, Zhouchao); Pham, VT (Viet-Thanh Pham); Khalaf, AJM (Khalaf, Abdul Jalil M.); Kengne, J (Kengne, Jacques); Jafari, S (Jafari, Sajad)

来源出版物: INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS 卷: 28 期: 7 文献号: 1850085 DOI: 10.1142/S0218127418500852 出版年: JUN 30 2018

Web of Science 核心合集中的 "被引频次": 39

被引频次合计: 39

摘要: In this paper, by modifying a known two-dimensional oscillator, we obtain an interesting new oscillator with coexisting limit cycles and point attractors. Then by changing this new system to its forced version and choosing a proper set of parameters, we introduce a chaotic system with some very interesting features. In this system, not only can we see the coexistence of different types of attractors, but also a fascinating phenomenon: some initial conditions can escape from the gravity of nearby attractors and travel far away before being trapped in an attractor beyond the usual access.

入藏号: WOS:000439096400008

出版商: WORLD SCIENTIFIC PUBL CO PTE LTD

出版商地址: 5 TOH TUCK LINK, SINGAPORE 596224, SINGAPORE

Web of Science 类别: Mathematics, Interdisciplinary Applications; Multidisciplinary Sciences

ISSN: 0218-1274

eISSN: 1793-6551

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 152 条，共 381 条

标题: Evolution of the spatiotemporal pattern of PM2.5 concentrations in China - A case study from the Beijing-Tianjin-Hebei region

作者: Yan, D (Yan, Dan); Lei, YL (Lei, Yalin); Shi, YK (Shi, Yukun); Zhu, Q (Zhu, Qing); Li, L (Li, Li); Zhang, Z (Zhang, Zhien)

来源出版物: ATMOSPHERIC ENVIRONMENT 卷: 183 页: 225-233 DOI: 10.1016/j.atmosenv.2018.03.041 出版年: JUN 2018

Web of Science 核心合集中的 "被引频次": 70

被引频次合计: 83

摘要: Atmospheric haze pollution has become a global concern because of its severe effects on human health and the environment. The Beijing-Tianjin-Hebei urban agglomeration is located in northern China, and its haze is the most serious in China. The high concentration of PM2.5 is the main cause of haze pollution, and thus investigating the temporal and spatial characteristics of PM2.5 is important for understanding the mechanisms underlying PM2.5 pollution and for preventing haze. In this study, the PM2.5 concentration status in 13 cities from the Beijing-Tianjin-Hebei region was statistically analyzed from January 2016 to November 2016, and the spatial variation of PM2.5 was explored via spatial autocorrelation analysis. The research yielded three overall results. (1) The distribution of PM2.5 concentrations in this area varied greatly during the study period. The concentrations increased from late autumn to early winter, and the spatial range expanded from southeast to northwest. In contrast, the PM2.5 concentration decreased rapidly from late winter to early spring, and the spatial range narrowed from northwest to southeast. (2) The spatial dependence degree, by season from high to low, was in the order winter, autumn, spring, summer. Winter (from December to February of the subsequent year) and summer (from June to August) were, respectively, the highest and lowest seasons with regard to the spatial homogeneity of PM2.5 concentrations. (3) The PM2.5 concentration in the Beijing-Tianjin-Hebei region has significant spatial spillovers. Overall, cities far from Bohai Bay, such as Shijiazhuang and Hengshui, demonstrated a high-high concentration of PM2.5 pollution, while coastal cities, such as Chengde and Qinhuangdao, showed a low-low concentration.

入藏号: WOS:000432761600019

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Environmental Sciences; Meteorology & Atmospheric Sciences

ISSN: 1352-2310

eISSN: 1873-2844

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 153 条，共 381 条

标题: Formation of Archean (3600-2500 Ma) continental crust in the Dharwar Craton, southern India

作者: Jayananda, M (Jayananda, M.); Santosh, M (Santosh, M.); Aadhiseshan, KR (Aadhiseshan, K. R.)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 181 页: 12-42 DOI: 10.1016/j.earscirev.2018.03.013 出版年: JUN 2018

Web of Science 核心合集中的 "被引频次": 68

被引频次合计: 68

摘要: The generation, preservation and destruction of continental crust on Earth is of wide interest in understanding the formation of continents, cratons and supercontinents as well as related mineral deposits. In this contribution, we integrate the available field, petrographic, geochronologic, elemental Nd-Hf-Pb isotope data for greenstones, TTG gneisses, sanukitoids and anatectic granites from the Dharwar Craton (southern India). This review allows us to evaluate the accretionary processes of juvenile crust, mechanisms of continental growth, and secular evolution of geodyrtamic processes through the 3600-2500 Ma window, hence providing important insights into building of continents in the Early Earth. The Dharwar Craton formed by assembly of micro-blocks with independent thermal records and accretionary histories. The craton can be divided into three crustal blocks (western, central and eastern) separated by major shear zones. The western block contains some of the oldest basement rocks with two generations of volcano-sedimentary greenstone sequences and discrete potassic plutons whereas the central block consist of older migmatitic TTGs, abundant younger transitional TTGs, remnants of ancient high grade supracrustal rocks, linear volcanic-dominated greenstone belts, voluminous calc-alkaline granitoids of sanukitoid affinity and anatectic granites. In contrast, the eastern block comprises younger transitional TTGs, abundant diatexites, thin volcanic-sedimentary greenstone belts and calc-alkaline plutons. Published geochronologic data show five major periods of felsic crust formation at ca. 3450-3300 Ma, 3230-3150 Ma, 3000-2960 Ma, 2700-2600 Ma, and 2560-2520 Ma which are sub-contemporaneous with the episodes of greenstone volcanism. U-Pb ages of inherited zircons in TTGs, as well as detrital zircons together with Nd-Pb-Hf isotope data, reveal continental records of 3800-3600 Ma. The U-Pb zircon data suggest at least four major reworking events during ca. 3200 Ma, 3000 Ma, 2620-2600 Ma, and 2530-2500 Ma corresponding to lower crustal melting and spatially linked high grade metamorphic events. The TTGs are sub-divided into the older (3450-3000 Ma) TTGs and the younger (2700-2600 Ma) transitional TTGs. The older TTGs can be further sub-divided into low-Al and high-Al groups. Elemental and isotopic data suggest that the low-Al type formed by melting of oceanic island arc crust within plagioclase stability field. In contrast, the elemental and isotopic features for the high-Al group suggest derivation of their magmatic precursor by melting of oceanic arc crust at deeper levels (55-65 km)with variable garnet and ilmenite in residue. The transitional TTGs likely formed by melting of composite sources involving both enriched oceanic arc crust and sub-arc mantle with minor contamination of ancient crustal components. The geochemical and isotopic compositions of granitoids with sanukitoid affinity suggest derivation from enriched mantle reservoirs. Finally, anatectic granites were produced by reworking of crustal sources with different histories. In the light of the data reviewed in this contribution, we propose the following scenario for the tectonic evolution of the Dharwar Craton. During 3450-3000 Ma, TTGs sources (oceanic arc crust) formed by melting of down going slabs and subsequent melting of such newly formed crust at different depths resulted in TTG magmas. On the contrary, by 2700 Ma the depth of slab melting increased.

Melting of slab at greater depth alongside the detritus results in enriched melts partly modified the overlying mantle wedge. Subsequent melting of such newly formed enriched oceanic arc crust and surrounding arc-mantle generated the magmatic precursor to transitional TTGs. Finally at ca. 2600-2560 Ma, eventual breakoff of down going slab caused mantle upwelling which induced low degree (10-15%) melting of overlying enriched mantle at different depths, thereby, generating the sanukitoid magmas which upon emplacement into the crust caused high temperature metamorphism, reworking and final cratonization.

The crustal accretion patterns in the Dharwar Craton share similarities with those in other Archean cratons such as the Bundelkhand Craton in Central India, Pilbara-Yilgarn Craton in Western Australia, Southern Africa (Swaziland and Limpopo belt), North China Craton, Tanzania Craton, Antongil Craton, NE Madagascar.

入藏号: WOS:000434748500002

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 154 条，共 381 条

标题: China can peak its energy-related carbon emissions before 2025: Evidence from industry restructuring

作者: Yu, SW (Yu, Shiwei); Zheng, SH (Zheng, Shuhong); Li, X (Li, Xia); Li, LX (Li, Longxi)

来源出版物: ENERGY ECONOMICS 卷: 73 页: 91-107 DOI: 10.1016/j.eneco.2018.05.012 出版年: JUN 2018

Web of Science 核心合集中的 "被引频次": 41

被引频次合计: 41

摘要: China has committed to a peak in carbon dioxide emissions circa 2030. However, current policies cannot meet this ambitious goal. Adjusting its energy-intensive, heavy and chemical-based industrial structure is not only the main way China can change its economic growth pattern but also a key policy strategy to achieve its carbon emission peak goal. In addition to carbon emissions goals, economic growth and employment security must be considered for China's development in the context of addressing climate change. Hence, by proposing a new economic-carbon emission-employment multi-objective optimization model, we take a different approach to analyze China's emissions trajectory. The optimized results show that China's energy-related carbon dioxide emissions could peak between 2022 and 2025, most likely in 2023, with CO2 emissions of 11.21-11.56 Gt. When pursuing this peak (from 2013 to 2030), China could still maintain an average growth of approximately 6.1 to 6.4% yr(-1) for GDP and approximately 0.24% to 0.51% yr(-1) for employment. Furthermore, China's coal consumption has peaked in 2013 while oil would be peaked around 2023 to 2025, based on the optimized industrial structure adjustment trajectory from 2013 to 2030. (C) 2018 Elsevier B.V. All rights reserved.

入藏号: WOS:000438000600007

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Economics

ISSN: 0140-9883

eISSN: 1873-6181

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 155 条，共 381 条

标题: Health information privacy concerns, antecedents, and information disclosure intention in online health communities

作者: Zhang, X (Zhang, Xing); Liu, S (Liu, Shan); Chen, X (Chen, Xing); Wang, L (Wang, Lin); Gao, BJ (Gao, Baojun); Zhu, Q (Zhu, Qing)

来源出版物: INFORMATION & MANAGEMENT 卷: 55 期: 4 页: 482-493 DOI: 10.1016/j.im.2017.11.003 出版年: JUN 2018

Web of Science 核心合集中的 "被引频次": 57

被引频次合计: 58

摘要: This study explores the antecedents and consequences of health information privacy concerns in online health communities by integrating the dual calculus and protection motivation theories. On the basis of survey data from 337 users, health information privacy concerns, together with informational and emotional support, significantly influence personal health information (PHI) disclosure intention. Privacy concerns are negatively influenced by two coping appraisals (i.e., response efficacy and self-efficacy) and positively affected by two threat appraisals (i.e., perceived vulnerability and perceived severity). The perceived health status differentially moderates the effects of privacy concerns and informational support on the PHI disclosure intention.

入藏号: WOS:000431748100008

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Computer Science, Information Systems; Information Science & Library Science; Management

ISSN: 0378-7206

eISSN: 1872-7530

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 156 条，共 381 条

标题: Carbon Quantum Dot Implanted Graphite Carbon Nitride Nanotubes: Excellent Charge Separation and Enhanced Photocatalytic Hydrogen Evolution

作者: Wang, Y (Wang, Yang); Liu, XQ (Liu, Xueqin); Liu, J (Liu, Jia); Han, B (Han, Bo); Hu, XQ (Hu, Xiaoqin); Yang, F (Yang, Fan); Xu, ZW (Xu, Zuwei); Li, YC (Li, Yinchang); Jia, SR (Jia, Songru); Li, Z (Li, Zhen); Zhao, YL (Zhao, Yanli)

来源出版物: ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 卷: 57 期: 20 页: 5765-5771 DOI: 10.1002/anie.201802014 出版年: MAY 14 2018

Web of Science 核心合集中的 "被引频次": 156

被引频次合计: 156

摘要: Graphite carbon nitride (g-C3N4) is a promising candidate for photocatalytic hydrogen production, but only shows moderate activity owing to sluggish photocarrier transfer and insufficient light absorption. Herein, carbon quantum dots (CQDs) implanted in the surface plane of g-C3N4 nanotubes were synthesized by thermal polymerization of freeze-dried urea and CQDs precursor. The CQD-implanted g-C3N4 nanotubes (CCTs) could simultaneously facilitate photoelectron transport and suppress charge recombination through their specially coupled heterogeneous interface. The electronic structure and morphology were optimized in the CCTs, contributing to greater visible light absorption and a weakened barrier of the photocarrier transfer. As a result, the CCTs exhibited efficient photocatalytic performance under light irradiation with a high H-2 production rate of 3538.3 mu mol g(-1) h(-1) and a notable quantum yield of 10.94% at 420 nm.

入藏号: WOS:000431488200032

PubMed ID: 29569367

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary

ISSN: 1433-7851

eISSN: 1521-3773

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 157 条，共 381 条

标题: KCl-mediated dual electronic channels in layered g-C3N4 for enhanced visible light photocatalytic NO removal

作者: Xiong, T (Xiong, Ting); Wang, H (Wang, Hong); Zhou, Y (Zhou, Ying); Sun, YJ (Sun, Yanjuan); Cen, WL (Cen, Wanglai); Huang, HW (Huang, Hongwei); Zhang, YX (Zhang, Yuxin); Dong, F (Dong, Fan)

来源出版物: NANOSCALE 卷: 10 期: 17 页: 8066-8074 DOI: 10.1039/c8nr01433g 出版年: MAY 7 2018

Web of Science 核心合集中的 "被引频次": 63

被引频次合计: 63

摘要: Limited by relatively fast charge carrier recombination, the performance of g-C3N4 photocatalysts is still far below what is expected. Herein, we tackle this challenge by introducing K and Cl ions into the interlayer of graphitic carbon nitride (KCl-doped g-C3N4). It is found that K and Cl ions coexisting in g-C3N4 could function as a dual channel for electron and hole transfer, respectively. As-prepared KCl-doped g-C3N4 shows a narrow bandgap, positive-shifted valence band edge and lower barriers for charge transfer between layers. Under visible light irradiation, the electrons created in the g-C3N4 layer are transferred by K ions, while the holes are transferred via Cl ions to induce photocatalysis. As expected, the enhanced visible light absorption, strong oxidization ability of the valence band holes and the prolonged lifetime of the charge carriers benefiting from the dual electronic channel endow KCl-doped g-C3N4 with a superior photocatalytic performance for NOx removal, exceeding the performances of both bare g-C3N4 and K doped g-C3N4. An in situ DRIFTS investigation reveals the reaction mechanism of the photocatalytic NO oxidation. The perspective of the dual channel for charge transfer could present a new design concept to effectively steer the efficiency of photocatalysts.

入藏号: WOS:000432261400023

PubMed ID: 29671458

出版商: ROYAL SOC CHEMISTRY

出版商地址: THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS, ENGLAND

Web of Science 类别: Chemistry, Multidisciplinary; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied

ISSN: 2040-3364

eISSN: 2040-3372

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 158 条，共 381 条

标题: Flexible Quasi-Solid-State Sodium-Ion Capacitors Developed Using 2D Metal-Organic-Framework Array as Reactor

作者: Xu, DM (Xu, Dongming); Chao, DL (Chao, Dongliang); Wang, HW (Wang, Huanwen); Gong, YS (Gong, Yansheng); Wang, R (Wang, Rui); He, BB (He, Beibei); Hu, XL (Hu, Xianluo); Fan, HJ (Fan, Hong Jin)

来源出版物: ADVANCED ENERGY MATERIALS 卷: 8 期: 13 文献号: 1702769 DOI: 10.1002/aenm.201702769 出版年: MAY 4 2018

Web of Science 核心合集中的 "被引频次": 114

被引频次合计: 115

摘要: Achieving high-performance Na-ion capacitors (NICs) has the particular challenge of matching both capacity and kinetics between the anode and cathode. Here a high-power NIC full device constructed from 2D metal-organic framework (MOFs) array is reported as the reactive template. The MOF array is converted to N-doped mesoporous carbon nanosheets (mp-CNSs), which are then uniformly encapsulated with VO2 and Na3V2(PO4)(3) (NVP) nanoparticles as the electroactive materials. By this method, the high-power performance of the battery materials is enabled to be enhanced significantly. It is discovered that such hybrid NVP@mp-CNSs array can render ultrahigh rate capability (up to 200 C, equivalent to discharge within 18 s) and superior cycle performance, which outperforms all NVP-based Na-ion battery cathodes reported so far. A quasi-solid-state flexible NIC based on the NVP@mp-CNSs cathode and the VO2@mp-CNSs anode is further assembled. This hybrid NIC device delivers both high energy density and power density as well as a good cycle stability (78% retention after 2000 cycles at 1 A g(-1)). The results demonstrate the powerfulness of MOF arrays as the reactor for fabricating electrode materials.

入藏号: WOS:000431613800011

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Physical; Energy & Fuels; Materials Science, Multidisciplinary; Physics, Applied; Physics, Condensed Matter

ISSN: 1614-6832

eISSN: 1614-6840

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 159 条，共 381 条

标题: Neoarchean granite-greenstone belts and related ore mineralization in the North China Craton: An overview

作者: Tang, L (Tang, Li); Santosh, M (Santosh, M.)

来源出版物: GEOSCIENCE FRONTIERS 卷: 9 期: 3 特刊: SI 页: 751-768 DOI: 10.1016/j.gsf.2017.04.002 出版年: MAY 2018

Web of Science 核心合集中的 "被引频次": 48

被引频次合计: 49

摘要: Tectonic processes involving amalgamations of microblocks along zones of ocean closure represented by granite-greenstone belts (GGB) were fundamental in building the Earth's early continents. The crustal growth and cratonization of the North China Craton (NCC) are correlated to the amalgamation of microblocks welded by 2.75-2.6 Ga and similar to 2.5 Ga GGBs. The lithological assemblages in the GGBs are broadly represented by volcano-sedimentary sequences, subduction-collision related granitoids and bimodal volcanic rocks (basalt and dacite) interlayered with minor komatiites and calc-alkalic volcanic rocks (basalt, andesite and felsic rock). The geochemical features of meta-basalts in the major GGBs of the NCC display affinity with N-MORB, E-MORB, OIB and calc-alkaline basalt, suggesting that the microblocks were separated by oceanic realm. The granitoid rocks display arc signature with enrichment of LILE (K, Rb, Sr, Ba) and LREE, and depletion of HFSE (Nb, Ta, Th, U, Ti) and HREE, and fall in the VAG field. The major mineralization includes Neoarchean BIF-type iron and VMS-type Cu-Zb deposits and these, together with the associated supracrustal rocks possibly formed in back-arc basins or arc-related oceanic slab subduction setting with or without input from mantle plumes. The 2.75-2.60 Ga TTG rocks, komatiites, meta-basalts and metasedimentary rocks in the Yanlingguan GGB are correlated to the up-welling mantle plume with eruption close to the continental margin within an ocean basin. The volcano-sedimentary rocks and granitoid rocks in the late Neoarchean GGBs display formation ages of 2.60-2.48 Ga, followed by metamorphism at 2.52-2.47 Ga, corresponding to a typical modern-style subduction-collision system operating at the dawn of Proterozoic. The late Neoarchean komatiite (Dongwufenzi GGB), sanukitoid (Dongwufenzi GGB and Western Shandong GGB), BIF (Zunhua GGB) and VMS deposit (Hongtoushan-Qingyuan-Helong GGB) have closer connection to a combined process of oceanic slab subduction and mantle plume. The Neoarchean cratonization of the NCC appears to have involved two stages of tectonic process along the 2.75-2.6 Ga GGB and similar to 2.5 Ga GGBs, the former involve plume-arc interaction process, and the latter involving oceanic lithospheric subduction, with or without arc-plume interaction. (C) 2018, China University of Geosciences (Beijing) and Peking University. Production and hosting by Elsevier B.V.

入藏号: WOS:000430087400007

出版商: CHINA UNIV GEOSCIENCES, BEIJING

出版商地址: 29 XUEYUAN RD, HAIDIAN DISTRICT, 100083, PEOPLES R CHINA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1674-9871

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 160 条，共 381 条

标题: The functionality of prebiotics as immunostimulant: Evidences from trials on terrestrial and aquatic animals

作者: Nawaz, A (Nawaz, Asad); Javaid, AB (Javaid, Allah Bakhsh); Irshad, S (Irshad, Sana); Hoseinifar, SH (Hoseinifar, Seyed Hossein); Xiong, HG (Xiong, Hanguo)

来源出版物: FISH & SHELLFISH IMMUNOLOGY 卷: 76 页: 272-278 DOI: 10.1016/j.fsi.2018.03.004 出版年: MAY 2018

Web of Science 核心合集中的 "被引频次": 69

被引频次合计: 71

摘要: The gut immune system is, the main option for maintaining host's health, affected by numerous factors comprising dietary constituents and commensal bacteria. These dietary components that affect the intestinal immunity and considered as an alternative of antibiotics are called immunosaccharides. Fructooligosaccharide (FOS), Galactooligosaccharide (GOS), inulin, dietary carbohydrates, and xylooligosaccharide (XOS) are among the most studied prebiotics in human as well as in aquaculture. Although prebiotics and probiotics have revealed potential as treatment for numerous illnesses in both human and fish, a comprehensive understanding of the molecular mechanism behind direct and indirect effect on the intestinal immune response will help more and perhaps extra effective therapy intended for ailments. This review covers the most newly deep-rooted scientific outcomes about the direct and indirect mechanism through which these dietetic strategies can affect intestinal immunity of terrestrial and aquatic animals. Prebiotics exert an influence on gut immune system via the increase in lysozyme and phagocytic activity, macrophage activation and stimulation of monocyte-derived dendritic cells. Furthermore, these functional molecules also enhance epithelial barrier function, beneficial gut microbial population, and production of intermediate metabolites for example short chain fatty acids (SCFAs) that assist in balancing the immune system. Moreover, emphasis will be sited on the relationship among food/feed, the microbiota, and the gut immune system. In conclusion, further studies are nonetheless essential to confirm the direct effect of prebiotics on immune response.

入藏号: WOS:000430888400033

PubMed ID: 29510254

出版商: ACADEMIC PRESS LTD- ELSEVIER SCIENCE LTD

出版商地址: 24-28 OVAL RD, LONDON NW1 7DX, ENGLAND

Web of Science 类别: Fisheries; Immunology; Marine & Freshwater Biology; Veterinary Sciences

ISSN: 1050-4648

eISSN: 1095-9947

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 161 条，共 381 条

标题: Tectonic evolution of the Qilian Shan: An early Paleozoic orogen reactivated in the Cenozoic

作者: Zuza, AV (Zuza, Andrew, V); Wu, C (Wu, Chen); Reith, RC (Reith, Robin C.); Yin, A (Yin, An); Li, JH (Li, Jianhua); Zhang, JY (Zhang, Jinyu); Zhang, YX (Zhang, Yuxiu); Wu, L (Wu, Long); Liu, WC (Liu, Wencan)

来源出版物: GEOLOGICAL SOCIETY OF AMERICA BULLETIN 卷: 130 期: 5-6 页: 881-925 DOI: 10.1130/B31721.1 出版年: MAY 2018

Web of Science 核心合集中的 "被引频次": 54

被引频次合计: 57

摘要: The Qilian Shan, located along the northeastern margin of the Tibetan Plateau, has experienced multiple episodes of tectonic deformation, including Neoproterozoic continental breakup, early Paleozoic subduction and continental collision, Mesozoic extension, and Cenozoic intracontinental orogenesis resulting from the India-Asia collision. In the central Qilian Shan, pre-Mesozoic ophiolite complexes, passive-continental margin sequences, and strongly deformed forearc strata were juxtaposed against arc plutonic/ volcanic rocks and ductilely deformed crystalline rocks during the early Paleozoic Qilian orogen. To better constrain this orogen and the resulting closure of the Neoproterozoic-Ordovician Qilian Ocean, we conducted an integrated investigation involving geologic mapping, U-Th-Pb zircon and monazite geochronology, whole-rock geochemistry, thermobarometry, and synthesis of existing data sets across northern Tibet. The central Qilian Shan experienced two phases of arc magmatism at 960-870 Ma and 475-445 Ma that were each followed by periods of protracted continental collision. Integrating our new data with previously published results, we propose the following tectonic model for the Proterozoic-Paleozoic history of northern Tibet. (1) Early Neoproterozoic subduction accommodated the convergence and collision between the South Tarim-Qaidam and North Tarim-North China continents. (2) Late Neoproterozoic rifting partially separated a peninsular Kunlun-Qaidam continent from the southern margin of the linked Tarim-North China craton and opened the Qilian Ocean as an embayed marginal sea; this separation broadly followed the trace of the earlier Neoproterozoic suture zone. (3) South-dipping subduction along the northern margin of the Kunlun-Qaidam continent initiated in the Cambrian, first developing as the Yushigou supra-subduction zone ophiolite and then transitioning into the continental Qilian arc. (4) South-dipping subduction, arc magmatism, and the convergence between Kunlun-Qaidam and North China continued throughout the Ordovician, with a trench-parallel intra-arc strike-slip fault system that is presently represented by high-grade metamorphic rocks that display a pervasive right-lateral shear sense. (5) Counterclockwise rotation of the peninsular Kunlun-Qaidam continent toward North China led to the closure of the Qilian Ocean, which is consistent with the right-lateral kinematics of intra-arc strike-slip faulting observed in the Qilian Shan and the westward tapering map-view geometry of Silurian fiysch-basin strata. Continental collision at ca. 445-440 Ma led to widespread plutonism across the Qilian Shan and is recorded by recrystallized monazite (ca. 450-420 Ma) observed in this study. Our tectonic model implies the parallel closure of two oceans of different ages along the trace of the Qilian suture zone since ca. 1.0 Ga.

In addition, the Qilian Ocean was neither the Proto- nor Paleo-Tethys (i.e., the earliest ocean separating Gondwana from Laurasia), as previously suggested, but was rather a relatively small embayed sea along the southern margin of the Laurasian continent. We also document >200 km of Cenozoic north-south shortening across the study area. The observed shortening distribution supports supports models of Tibetan Plateau development that involve distributed crustal shortening and southward underthrusting of Eurasia beneath the plateau. This India-Asia convergence-related deformation is focused along the sites of repeated ocean closure. Major Cenozoic left-slip faults parallel these sutures, and preexisting subduction-melange channels may have facilitated Cenozoic shortening and continental underthrusting

入藏号: WOS:000432588700011

出版商: GEOLOGICAL SOC AMER, INC

出版商地址: PO BOX 9140, BOULDER, CO 80301-9140 USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0016-7606

eISSN: 1943-2674

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 162 条，共 381 条

标题: Progress and performance evaluation of BeiDou global navigation satellite system: Data analysis based on BDS-3 demonstration system

作者: Yang, YX (Yang, Yuanxi); Xu, YY (Xu, Yangyin); Li, JL (Li, Jinlong); Yang, C (Yang, Cheng)

来源出版物: SCIENCE CHINA-EARTH SCIENCES 卷: 61 期: 5 页: 614-624 DOI: 10.1007/s11430-017-9186-9 出版年: MAY 2018

Web of Science 核心合集中的 "被引频次": 60

被引频次合计: 71

摘要: The first two Medium Earth Orbit (MEO) satellites of the third generation of BeiDou satellite navigation System (BDS-3) were successfully launched on November 5, 2017. This historical launch starts the new era of the global navigation satellite system of BeiDou. Before the first two satellites of BDS-3, a demonstration system for BDS-3 with five satellites, including two Inclined Geosynchronous Orbit satellites (IGSO) and three MEO satellites, was established between 2015 and 2016 for testing the new payloads, new designed signals and new techniques. In the demonstration system, the new S frequency signal and satellite hydrogen clock as well as inter-satellite link (ISL) based on Ka-band signals with time-division multiple addresses (TDMA) were tested. This paper mainly analyzes the performances of the demonstration system, including the signalto- noise ratios, pseudorange errors and the multipath errors of the civilian signals of BDS-3. The qualities of signals in space, time synchronization and timing precision were tested as well. Most of the performances were compared with those of the regional BeiDou satellite navigation system (BDS-2). At last, the performances of positioning, navigation and timing (PNT) of the future BeiDou global system (BDS-3) were evaluated based on the signal quality of the present demonstration satellite system.

入藏号: WOS:000430858000008

出版商: SCIENCE PRESS

出版商地址: 16 DONGHUANGCHENGGEN NORTH ST, BEIJING 100717, PEOPLES R CHINA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1674-7313

eISSN: 1869-1897

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 163 条，共 381 条

标题: Recent Advances in Layered Ti3C2Tx MXene for Electrochemical Energy Storage

作者: Xiong, DB (Xiong, Dongbin); Li, XF (Li, Xifei); Bai, ZM (Bai, Zhimin); Lu, SG (Lu, Shigang)

来源出版物: SMALL 卷: 14 期: 17 文献号: 1703419 DOI: 10.1002/smll.201703419 出版年: APR 26 2018

Web of Science 核心合集中的 "被引频次": 264

被引频次合计: 268

摘要: Ti3C2Tx, a typical representative among the emerging family of 2D layered transition metal carbides and/or nitrides referred to as MXenes, has exhibited multiple advantages including metallic conductivity, a plastic layer structure, small band gaps, and the hydrophilic nature of its functionalized surface. As a result, this 2D material is intensively investigated for application in the energy storage field. The composition, morphology and texture, surface chemistry, and structural configuration of Ti3C2Tx directly influence its electrochemical performance, e.g., the use of a well-designed 2D Ti3C2Tx as a rechargeable battery anode has significantly enhanced battery performance by providing more chemically active interfaces, shortened ion-diffusion lengths, and improved in-plane carrier/charge-transport kinetics. Some recent progresses of Ti3C2Tx MXene are achieved in energy storage. This Review summarizes recent advances in the synthesis and electrochemical energy storage applications of Ti3C2Tx MXene including supercapacitors, lithium-ion batteries, sodium-ion batteries, and lithium-sulfur batteries. The current opportunities and future challenges of Ti3C2Tx MXene are addressed for energy-storage devices. This Review seeks to provide a rational and in-depth understanding of the relation between the electrochemical performance and the nanostructural/chemical composition of Ti3C2Tx, which will promote the further development of 2D MXenes in energy-storage applications.

入藏号: WOS:000430922100003

PubMed ID: 29399994

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary; Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied; Physics, Condensed Matter

ISSN: 1613-6810

eISSN: 1613-6829

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 164 条，共 381 条

标题: Highly Efficient Blue Emission and Superior Thermal Stability of BaAI(12)O(19):Eu2+ Phosphors Based on Highly Symmetric Crystal Structure

作者: Wei, Y (Wei, Yi); Cao, L (Cao, Ling); Lv, LM (Lv, Lemin); Li, GG (Li, Guogang); Hao, JR (Hao, Jiarui); Gao, JS (Gao, Junsong); Su, CC (Su, Chaochin); Lin, CC (Lin, Chun Che); Jang, HS (Jang, Ho Seong); Dang, PP (Dang, Peipei); Lin, J (Lin, Jun)

来源出版物: CHEMISTRY OF MATERIALS 卷: 30 期: 7 页: 2389-2399 DOI: 10.1021/acs.chemmater.8b00464 出版年: APR 10 2018

Web of Science 核心合集中的 "被引频次": 121

被引频次合计: 121

摘要: Highly efficient phosphor materials with superior thermal stability are indispensable for phosphor-converted white light-emitting diodes (pc-WLEDs) solid state lighting. In order to obtain a high quality warm white light, near-ultraviolet (n-UV) chips combined with trichromatic phosphors have be extensively studied. Among them, the development of efficient blue phosphor remains a challenging task. In view of the close correlation between 5d-4f transitions of rare earth ions and the coordination environment of host lattice, many studies have been dedicated to improving the photoluminescence performances by modifying the lattice coordination environment including the lattice rigidity and symmetry. In this work, we reported highly efficient blue-emitting Eu2+-doped BaAI(12)O(19) (BAO) phosphors with excellent thermal stability, which were prepared via the traditional high-temperature solid state reaction routes. According to the X-ray powder diffraction (XRD) Rietveld refinement analysis, BAO owned a highly symmetric layer structure with two Ba polyhedrons, marked as Ba(1)O(9 )and Ba(2)O-10 , respectively. The diffuse reflectance spectra revealed the optical band gap to be 4.07 eV. Due to the suitable optical bandgap, the Eu2+ ions could realize a highly efficient doping in the BAO matrix. The photoluminescence excitation (PLE) spectra for asprepared BAO:Eu2+ phosphors exhibited a broad absorption band in the region from 250 to 430 nm, matching well with the n-UV LED chip. Under the UV radiation, it is highly luminous (internal quantum yields (IQYs) = 90%) with the peak around 443 nm. Furthermore, the color purity of BAO:Eu2+ phosphors could achieve 92%, ascribing to the narrow full width at halfmaximum (fwhm = 52 nm), which was even much better than that of commercially available BAM:Eu 2+ phosphor (color purity = 91.34%, fwhm = 51.7 nm). More importantly, the as-prepared BAO:Eu2+ phosphor showed extra high thermal stability when working in the region of 298-550 K, which was a bit better than that of commercial BAM:Eu2+ phosphors. According to the distortion calculation of Ba crystallographic occupation, the superior thermal stability could be attributed to the highly symmetric crystal structure of BAO host. In view of the excellent luminescence performances of BAO:Eu2+, it is a promising blue-emitting phosphor for n-UV WLED.

入藏号: WOS:000430023700026

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Chemistry, Physical; Materials Science, Multidisciplinary

ISSN: 0897-4756

eISSN: 1520-5002

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 165 条，共 381 条

标题: Microporous Framework Induced Synthesis of Single-Atom Dispersed Fe-N-C Acidic ORR Catalyst and Its in Situ Reduced Fe-N-4 Active Site Identification Revealed by X-ray Absorption Spectroscopy

作者: Xiao, ML (Xiao, Meiling); Zhu, JB (Zhu, Jianbing); Ma, L (Ma, Liang); Jin, Z (Jin, Zhao); Ge, J (Ge, Junjie); Deng, XJ (Deng, Xin); Hou, Y (Hou, Yang); He, QG (He, Qinggang); Li, JK (Li, Jingkun); Jia, QY (Jia, Qingying); Mukerjee, S (Mukerjee, Sanjeev); Yang, R (Yang, Ruoou); Jiang, Z (Jiang, Zheng); Su, DS (Su, Dangsheng); Liu, CP (Liu, Changpeng); Xing, W (Xing, Wei)

来源出版物: ACS CATALYSIS 卷: 8 期: 4 页: 2824-2832 DOI: 10.1021/acscatal.8b00138 出版年: APR 2018

Web of Science 核心合集中的 "被引频次": 144

被引频次合计: 148

摘要: Developing highly efficient, low-cost oxygen reduction catalysts, especially in acidic medium, is of significance toward fuel cell commercialization. Although pyrolyzed Fe-N-C catalysts have been regarded as alternatives to platinum based catalytic materials, further improvement requires precise control of the Fe-N-x structure at the molecular level and a comprehensive understanding of catalytic site structure and the ORR mechanism on these materials. In this report, we present a microporous metal-organic-framework-confined strategy toward the preferable formation of single-atom dispersed catalysts. The onset potential for Fe-N-C is 0.92 V, comparable to that of Pt/C and outperforming most noble-metal-free catalysts ever reported. A high-spin Fe3+-N-4 configuration is revealed by the Fe-57 Mossbauer spectrum and X-ray absorption spectroscopy for Fe L-edge, which will convert to Fe2+-N-4 at low potential. The in situ reduced Fe2+-N-4 moiety from high-spin O-x-Fe3+-N-4 contributes to most of the ORR activity due to its high turnover frequency (TOF) of ca. 1.71 e s(-1) sites(-1).

入藏号: WOS:000430154100025

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Chemistry, Physical

ISSN: 2155-5435

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 166 条，共 381 条

标题: State Estimation for Discrete Time-Delayed Genetic Regulatory Networks With Stochastic Noises Under the Round-Robin Protocols

作者: Wan, XB (Wan, Xiongbo); Wang, ZD (Wang, Zidong); Wu, M (Wu, Min); Liu, XH (Liu, Xiaohui)

来源出版物: IEEE TRANSACTIONS ON NANOBIOSCIENCE 卷: 17 期: 2 页: 145-154 DOI: 10.1109/TNB.2018.2797124 出版年: APR 2018

Web of Science 核心合集中的 "被引频次": 62

被引频次合计: 62

摘要: This paper investigates the problem of state estimation for discrete time-delayed genetic regulatory networks with stochastic process noises and bounded exogenous disturbances under the Round-Robin (RR) protocols. The network measurement outputs obtained by two groups of sensors are transmitted to two remote subestimators via two independent communication channels, respectively. To lighten the communication loads of the networks and reduce the occurrence rate of data collisions, two RR protocols are utilized to orchestrate the transmission orders of sensor nodes in two groups, respectively. The error dynamics of the state estimation is governed by a switched system with periodic switching parameters. By constructing a transmission-order-dependent Lyapunov-like functional and utilizing the up-to-date discrete Wirtinger-based inequality together with the reciprocally convex approach, sufficient conditions are established to guarantee the exponentially ultimate boundedness of the estimation error dynamics in mean square with a prescribed upper bound on the decay rate. An asymptotic upper bound of the outputs of the estimation errors in mean square is derived and the estimator parameters are then obtained by minimizing such an upper bound subject to linear matrix inequality constraints. The repressilator model is utilized to illustrate the effectiveness of the designed estimator.

入藏号: WOS:000434288000007

PubMed ID: 29870338

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Biochemical Research Methods; Nanoscience & Nanotechnology

ISSN: 1536-1241

eISSN: 1558-2639

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 167 条，共 381 条

标题: Progress in enhancement of CO2 absorption by nanofluids: A mini review of mechanisms and current status

作者: Zhang, Z (Zhang, Zhien); Cai, JC (Cai, Jianchao); Chen, F (Chen, Feng); Li, H (Li, Hao); Zhang, WX (Zhang, Wenxiang); Qi, WJ (Qi, Wenjie)

来源出版物: RENEWABLE ENERGY 卷: 118 页: 527-535 DOI: 10.1016/j.renene.2017.11.031 出版年: APR 2018

Web of Science 核心合集中的 "被引频次": 125

被引频次合计: 126

摘要: Nanotechnology is a new technique which is widely applied in several energy systems. The novel process of CO2 absorption or conversion enhancement using nanofluids receives significant attention in recent decades. A comprehensive literature review on CO2 absorption enhancement by nanofluids is here compiled. This present review covers the nanofluids preparation methods, enhancement mechanisms, and the enhancement factors of the gas-liquid system. The nanofluids parameters and fluid flow rates effects on the enhancement of CO2 absorption are discussed and highlighted. Moreover, this review indicates that the CO2-nanofluids system is a promising technique for gas pollution control. However, a lot of future works are needed to increase the absorption behavior and performance of the nanofluids as well as reduce the energy consumption during the capture process. (C) 2017 Elsevier Ltd. All rights reserved.

入藏号: WOS:000423008500046

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Green & Sustainable Science & Technology; Energy & Fuels

ISSN: 0960-1481

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 168 条，共 381 条

标题: Life cycle assessment and environmental cost accounting of coal-fired power generation in China

作者: Wang, JM (Wang, Jinman); Wang, RG (Wang, Ruogu); Zhu, YC (Zhu, Yucheng); Li, JY (Li, Jiayan)

来源出版物: ENERGY POLICY 卷: 115 页: 374-384 DOI: 10.1016/j.enpol.2018.01.040 出版年: APR 2018

Web of Science 核心合集中的 "被引频次": 44

被引频次合计: 48

摘要: It is necessary to analyze the environmental impact of the entire process of coal-fired power generation to take effective measures for controlling energy consumption and reducing pollutant emission. However, very few studies have examined the coal mining, washing and transportation stages in the life cycle of coal-fired power generation and it's environmental cost. In this study, the life cycle assessment (LCA) method was adopted to analyze the environmental impact of coal-fired power generation in China. Further, the relevant cost theory was used to calculate the resource consumption cost and external environmental cost of coal-fired power generation. The key environmental impact category was smoke and dust, and the main emissions were CO2, CO, SO2, TSP, COD, and boiler ash. The emissions with high environmental cost were coal, SO2, COD, and boiler ash. The environmental cost at the power generation stage was the highest, with a value of $50.24. The resource consumption cost and external environmental cost per unit of MWh power in the life cycle was $46.01 and $22.90, respectively. Upgrading the facilities for emission reduction, improving emission standards of pollutants, and strengthening process management of coal-fired power generation are effective ways to reduce the burden on the environment.

入藏号: WOS:000428099800037

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Economics; Energy & Fuels; Environmental Sciences; Environmental Studies

ISSN: 0301-4215

eISSN: 1873-6777

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 169 条，共 381 条

标题: An Intracellular H2O2-Responsive AIEgen for the Peroxidase-Mediated Selective Imaging and Inhibition of Inflammatory Cells

作者: Cheng, Y (Cheng, Yong); Dai, J (Dai, Jun); Sun, CL (Sun, Chunli); Liu, R (Liu, Rui); Zhai, TY (Zhai, Tianyou); Lou, XD (Lou, Xiaoding); Xia, F (Xia, Fan)

来源出版物: ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 卷: 57 期: 12 页: 3123-3127 DOI: 10.1002/anie.201712803 出版年: MAR 12 2018

Web of Science 核心合集中的 "被引频次": 100

被引频次合计: 102

摘要: Inflammatory cells have gained widespread attention because inflammatory diseases increase the risk for many types of cancer. Therefore, it is urgent and important to implement detection and treatment methods for inflammatory cells. Herein, we constructed a theranostic probe with aggregation-induced emission (AIE) characteristics, in which tetraphenylethene (TPE) was modified with two tyrosine (Tyr) moieties. Owing to the H2O2-dependent, enzyme-catalyzed dityrosine formation, Tyr-containing TPE (TT) molecules crosslink through dityrosine linkages to induce the formation of hydrophobic aggregates, activating the AIE process in inflammatory cells that contain H2O2 and overexpress myeloperoxidase. The emission turn-on resulting from the crosslinking of TT molecules could be used to distinguish between inflammatory and normal cells. Moreover, the massive TT aggregates induced mitochondria damage and cell apoptosis. This study demonstrates that the H2O2-responsive peroxidase-activated AIEgen holds great promise for inflammatory-cell selective imaging and inhibition.

入藏号: WOS:000426759900019

PubMed ID: 29383811

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary

ISSN: 1433-7851

eISSN: 1521-3773

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 170 条，共 381 条

标题: Ice-VII inclusions in diamonds: Evidence for aqueous fluid in Earth's deep mantle

作者: Tschauner, O (Tschauner, O.); Huang, S (Huang, S.); Greenberg, E (Greenberg, E.); Prakapenka, VB (Prakapenka, V. B.); Ma, C (Ma, C.); Rossman, GR (Rossman, G. R.); Shen, AH (Shen, A. H.); Zhang, D (Zhang, D.); Newville, M (Newville, M.); Lanzirotti, A (Lanzirotti, A.); Tait, K (Tait, K.)

来源出版物: SCIENCE 卷: 359 期: 6380 页: 1136-+ DOI: 10.1126/science.aao3030 出版年: MAR 9 2018

Web of Science 核心合集中的 "被引频次": 52

被引频次合计: 56

摘要: Water-rich regions in Earth's deeper mantle are suspected to play a key role in the global water budget and the mobility of heat-generating elements. We show that ice-VII occurs as inclusions in natural diamond and serves as an indicator for such water-rich regions. Ice-VII, the residue of aqueous fluid present during growth of diamond, crystallizes upon ascent of the host diamonds but remains at pressures as high as 24 gigapascals; it is now recognized as a mineral by the International Mineralogical Association. In particular, ice-VII in diamonds points toward fluid-rich locations in the upper transition zone and around the 660-kilometer boundary.

入藏号: WOS:000426835900041

PubMed ID: 29590042

出版商: AMER ASSOC ADVANCEMENT SCIENCE

出版商地址: 1200 NEW YORK AVE, NW, WASHINGTON, DC 20005 USA

Web of Science 类别: Multidisciplinary Sciences

ISSN: 0036-8075

eISSN: 1095-9203

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 171 条，共 381 条

标题: Nanomaterials and technologies for low temperature solid oxide fuel cells: Recent advances, challenges and opportunities

作者: Fan, LD (Fan, Liangdong); Zhu, B (Zhu, Bin); Su, PC (Su, Pei-Chen); He, CX (He, Chuanxin)

来源出版物: NANO ENERGY 卷: 45 页: 148-176 DOI: 10.1016/j.nanoen.2017.12.044 出版年: MAR 2018

Web of Science 核心合集中的 "被引频次": 121

被引频次合计: 122

摘要: Solid oxide fuel cells (SOFCs) show considerable promise for meeting the current ever-increasing energy demand and environmental sustainability requirements because of their high efficiency, low environmental impact, and distinct fuel diversity. In the past few decades, extensive R&D efforts have been focused on lowering operational temperatures in order to decrease the system (stack and balance-of-plant) cost and improve the longevity of operationally useful devices of commercial relevance. Nanomaterials and related nanotechnologies have the potential to improve SOFC performance because of their advantageous functionalities, namely, their enlarged surface area and unique surface and interface properties compared to their microscale analogs. Recently, the use of nanomaterials has increased rapidly, as reflected by the exponential growth in the number of publications since 2002. In this work, we present a comprehensive summary of nanoparticles, nano-thin films and nanocomposites with different crystal phases, morphologies, microstructures, electronic properties, and electrochemical performances for low temperature SOFCs (LT-SOFCs), with focus on efforts to enhance electrical efficiency, to induce novel fundamental properties that are inaccessible in microcrystalline materials, and to promote the commercialization of LT-SOFCs. Recent progress in the applications of many classically or newly chemical and physical nanomaterials and nanofabrication techniques, such as thin film vacuum deposition, impregnation, electrospinning, spark plasma sintering, hard-and soft-template methods, and in-situ nanoparticle surface exsolution are also thoroughly described. The technological and scientific advantages and limitations related to the use of nanomaterials and nanotechnologies are highlighted, along with our expectations for future research within this emerging field.

入藏号: WOS:000425396400018

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied

ISSN: 2211-2855

eISSN: 2211-3282

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 172 条，共 381 条

标题: Landslide susceptibility modeling applying machine learning methods: A case study from Longju in the Three Gorges Reservoir area, China

作者: Zhou, C (Zhou, Chao); Yin, KL (Yin, Kunlong); Cao, Y (Cao, Ying); Ahmed, B (Ahmed, Bayes); Li, YY (Li, Yuanyao); Catani, F (Catani, Filippo); Pourghasemi, HR (Pourghasemi, Hamid Reza)

来源出版物: COMPUTERS & GEOSCIENCES 卷: 112 页: 23-37 DOI: 10.1016/j.cageo.2017.11.019 出版年: MAR 2018

Web of Science 核心合集中的 "被引频次": 78

被引频次合计: 81

摘要: Landslide is a common natural hazard and responsible for extensive damage and losses in mountainous areas. In this study, Longju in the Three Gorges Reservoir area in China was taken as a case study for landslide susceptibility assessment in order to develop effective risk prevention and mitigation strategies. To begin, 202 landslides were identified, including 95 colluvial landslides and 107 rockfalls. Twelve landslide causal factor maps were prepared initially, and the relationship between these factors and each landslide type was analyzed using the information value model. Later, the unimportant factors were selected and eliminated using the information gain ratio technique. The landslide locations were randomly divided into two groups: 70% for training and 30% for verifying. Two machine learning models: the support vector machine (SVM) and artificial neural network (ANN), and a multivariate statistical model: the logistic regression (LR), were applied for landslide susceptibility modeling (LSM) for each type. The LSM index maps, obtained from combining the assessment results of the two landslide types, were classified into five levels. The performance of the LSMs was evaluated using the receiver operating characteristics curve and Friedman test. Results show that the elimination of noise-generating factors and the separated modeling of each landslide type have significantly increased the prediction accuracy. The machine learning models outperformed the multivariate statistical model and SVM model was found ideal for the case study area.

入藏号: WOS:000424186000003

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Computer Science, Interdisciplinary Applications; Geosciences, Multidisciplinary

ISSN: 0098-3004

eISSN: 1873-7803

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 173 条，共 381 条

标题: In situ growth of OD silica nanospheres on 2D molybdenum disulfide nanosheets: Towards reducing fire hazards of epoxy resin

作者: Zhou, KQ (Zhou, Keqing); Tang, G (Tang, Gang); Gao, R (Gao, Rui); Jiang, SD (Jiang, Shudong)

来源出版物: JOURNAL OF HAZARDOUS MATERIALS 卷: 344 页: 1078-1089 DOI: 10.1016/j.jhazmat.2017.11.059 出版年: FEB 15 2018

Web of Science 核心合集中的 "被引频次": 58

被引频次合计: 58

摘要: This report described a facile process for the preparation of 2D/OD MoS2-SiO2 hybrids using a simple in situ growth method, with the purpose of promoting the dispersion of MoS2 in polymer matrices and improving the properties of polymer materials. FTIR, XPS, TGA and TEM measurements were performed to characterize the structure and morphology of the synthesized hybrids which were then introduced into epoxy to reduce flammability. The hybrids dispersed well in the epoxy matrix. No obvious agglomerations were observed. In comparison with those of neat epoxy, the incorporation of a low loading of MoS2-SiO2 hybrids resulted in significant decrements in heat release rate, total heat release and volume of toxic effluents released during combustion, which indicated that the fire hazards of epoxy composites were strongly reduced. The good dispersion, labyrinth barrier effect and the catalytic effect of MoS2-SiO2 hybrids on char formation may contribute to the observed decrease in the flammability of epoxy resin. (C) 2017 Elsevier B.V. All rights reserved.

入藏号: WOS:000423246700108

PubMed ID: 30216967

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Environmental; Environmental Sciences

ISSN: 0304-3894

eISSN: 1873-3336

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 174 条，共 381 条

标题: Unraveling the Mechanisms of Visible Light Photocatalytic NO Purification on Earth-Abundant Insulator-Based Core-Shell Heterojunctions

作者: Wang, H (Wang, Hong); Sun, YJ (Sun, Yanjuan); Jiang, GM (Jiang, Guangming); Zhang, YX (Zhang, Yuxin); Huang, HW (Huang, Hongwei); Wu, ZB (Wu, Zhongbiao); Lee, SC (Lee, S. C.); Dong, F (Dong, Fan)

来源出版物: ENVIRONMENTAL SCIENCE & TECHNOLOGY 卷: 52 期: 3 页: 1479-1487 DOI: 10.1021/acs.est.7b05457 出版年: FEB 6 2018

Web of Science 核心合集中的 "被引频次": 79

被引频次合计: 80

摘要: Earth-abundant insulators are seldom exploited as photocatalysts. In this work, we constructed a novel family of insulator-based heterojunctions and demonstrated their promising applications in photocatalytic NO purification, even under visible light irradiation. The heterojunction formed between the insulator SrCO3 and the photosensitizer BiOI, via a special SrCO3-BiOI core-shell structure, exhibits an enhanced visible light absorbance between 400-600 nm, and an unprecedentedly high photocatalytic NO removal performance. Further density functional theory (DFT) calculations and X-ray photoelectron spectroscopy (XPS) analysis revealed that the covalent interaction between the O 2p orbital of the insulator (SrCO3, n-type) and the Bi 6p orbital of photosensitizer (BiOI, p-type) can provide an electron transfer channel between SrCO3 and BiOI, allowing the transfer of the photoexcited electrons from the photosensitizer to the conduction band of insulator (confirmed by charge difference distribution analysis and time-resolved fluorescence spectroscopy). The center dot O-2(-) and center dot OH radicals are the main reactive species in photocatalytic NO oxidation. A reaction pathway study based on both in situ FT-IR and molecular-level simulation of NO adsorption and transformation indicates that this heterojunction can efficiently transform NO to harmless nitrate products via the NO -> NO+ and NO2+-> nitrate or nitrite routes. This work provides numerous opportunities to explore earth-abundant insulators as visible-light-driven photocatalysts, and also offers a new mechanistic understanding of the role of gas-phase photocatalysis in controlling air pollution.

入藏号: WOS:000424851700062

PubMed ID: 29272109

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Engineering, Environmental; Environmental Sciences

ISSN: 0013-936X

eISSN: 1520-5851

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 175 条，共 381 条

标题: A NEW METHOD FOR CALCULATING FRACTAL DIMENSIONS OF POROUS MEDIA BASED ON PORE SIZE DISTRIBUTION

作者: Xia, YX (Xia, Yuxuan); Cai, JC (Cai, Jianchao); Wei, W (Wei, Wei); Hu, XY (Hu, Xiangyun); Wang, X (Wang, Xin); Ge, XM (Ge, Xinmin)

来源出版物: FRACTALS-COMPLEX GEOMETRY PATTERNS AND SCALING IN NATURE AND SOCIETY 卷: 26 期: 1 文献号: 1850006 DOI: 10.1142/S0218348X18500068 出版年: FEB 2018

Web of Science 核心合集中的 "被引频次": 43

被引频次合计: 45

摘要: Fractal theory has been widely used in petrophysical properties of porous rocks over several decades and determination of fractal dimensions is always the focus of researches and applications by means of fractal-based methods. In this work, a new method for calculating pore space fractal dimension and tortuosity fractal dimension of porous media is derived based on fractal capillary model assumption. The presented work establishes relationship between fractal dimensions and pore size distribution, which can be directly used to calculate the fractal dimensions. The published pore size distribution data for eight sandstone samples are used to calculate the fractal dimensions and simultaneously compared with prediction results from analytical expression. In addition, the proposed fractal dimension method is also tested through Micro-CT images of three sandstone cores, and are compared with fractal dimensions by box-counting algorithm. The test results also prove a self-similar fractal range in sandstone when excluding smaller pores.

入藏号: WOS:000425655700006

出版商: WORLD SCIENTIFIC PUBL CO PTE LTD

出版商地址: 5 TOH TUCK LINK, SINGAPORE 596224, SINGAPORE

Web of Science 类别: Mathematics, Interdisciplinary Applications; Multidisciplinary Sciences

ISSN: 0218-348X

eISSN: 1793-6543

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 176 条，共 381 条

标题: Global land-water nexus: Agricultural land and freshwater use embodied in worldwide supply chains

作者: Chen, B (Chen, B.); Hanb, MY (Hanb, M. Y.); Peng, K (Peng, K.); Zhou, SL (Zhou, S. L.); Shao, L (Shao, L.); Wu, XF (Wu, X. F.); Wei, WD (Wei, W. D.); Liu, SY (Liu, S. Y.); Li, Z (Li, Z.); Li, JS (Li, J. S.); Chen, GQ (Chen, G. Q.)

来源出版物: SCIENCE OF THE TOTAL ENVIRONMENT 卷: 613 页: 931-943 DOI: 10.1016/j.scitotenv.2017.09.138 出版年: FEB 1 2018

Web of Science 核心合集中的 "被引频次": 105

被引频次合计: 106

摘要: As agricultural land and freshwater inextricably interrelate and interact with each other, the conventional water and land policy in "silos" should give way to nexus thinking when formulating the land and water management strategies. This study constructs a systems multi-regional input-output (MRIO) model to expound global land-water nexus by simultaneously tracking agricultural land and freshwater use flows along the global supply chains. Furthermore, land productivity and irrigationwater requirements of 160 crops in different regions are investigated to reflect the land-water linkage. Results show that developed economies (e.g., USA and Japan) and major large developing economies (e.g., mainland China and India) are the overriding drivers of agricultural land and freshwater use globally. In general, significant net transfers of these two resources are identified from resource-rich and less-developed economies to resource-poor and more-developed economies. For some crops, bluewater productivity is inversely related to land productivity, indicating that irrigationwater consumption is sometimes at odds with land use. The results could stimulus international cooperation for sustainable land and freshwater management targeting on original suppliers and final consumers along the global supply chains. Moreover, crop-specific land-water linkage could provide insights for trade-off decisions on minimizing the environmental impacts on local land and water resources. (C) 2017 Elsevier B.V. All rights reserved.

入藏号: WOS:000414160500096

PubMed ID: 28946381

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Environmental Sciences

ISSN: 0048-9697

eISSN: 1879-1026

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 177 条，共 381 条

标题: Hydrological Cycle in the Heihe River Basin and Its Implication for Water Resource Management in Endorheic Basins

作者: Li, X (Li, Xin); Cheng, GD (Cheng, Guodong); Ge, YC (Ge, Yingchun); Li, HY (Li, Hongyi); Han, F (Han, Feng); Hu, XL (Hu, Xiaoli); Tian, W (Tian, Wei); Tian, Y (Tian, Yong); Pan, XD (Pan, Xiaoduo); Nian, YY (Nian, Yanyun); Zhang, YL (Zhang, Yanlin); Ran, YH (Ran, Youhua); Zheng, Y (Zheng, Yi); Gao, B (Gao, Bing); Yang, DW (Yang, Dawen); Zheng, CM (Zheng, Chunmiao); Wang, XS (Wang, Xusheng); Liu, SM (Liu, Shaomin); Cai, XM (Cai, Ximing)

来源出版物: JOURNAL OF GEOPHYSICAL RESEARCH-ATMOSPHERES 卷: 123 期: 2 页: 890-914 DOI: 10.1002/2017JD027889 出版年: JAN 27 2018

Web of Science 核心合集中的 "被引频次": 74

被引频次合计: 77

摘要: Endorheic basins around the world are suffering from water and ecosystem crisis. To pursue sustainable development, quantifying the hydrological cycle is fundamentally important. However, knowledge gaps exist in how climate change and human activities influence the hydrological cycle in endorheic basins. We used an integrated ecohydrological model, in combination with systematic observations, to analyze the hydrological cycle in the Heihe River Basin, a typical endorheic basin in arid region of China. The water budget was closed for different landscapes, river channel sections, and irrigation districts of the basin from 2001 to 2012. The results showed that climate warming, which has led to greater precipitation, snowmelt, glacier melt, and runoff, is a favorable factor in alleviating water scarcity. Human activities, including ecological water diversion, cropland expansion, and groundwater overexploitation, have both positive and negative effects. The natural oasis ecosystem has been restored considerably, but the overuse of water in midstream and the use of environmental flow for agriculture in downstream have exacerbated the water stress, resulting in unfavorable changes in surface-ground water interactions and raising concerns regarding how to fairly allocate water resources. Our results suggest that the water resource management in the region should be adjusted to adapt to a changing hydrological cycle, cropland area must be reduced, and the abstraction of groundwater must be controlled. To foster long-term benefits, water conflicts should be handled from a broad socioeconomic perspective. The findings can provide useful information on endorheic basins to policy makers and stakeholders around the world.

入藏号: WOS:000425520200017

出版商: AMER GEOPHYSICAL UNION

出版商地址: 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Web of Science 类别: Meteorology & Atmospheric Sciences

ISSN: 2169-897X

eISSN: 2169-8996

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 178 条，共 381 条

标题: Honeycomb-like structured biological porous carbon encapsulating PEG: A shape-stable phase change material with enhanced thermal conductivity for thermal energy storage

作者: Zhao, YJ (Zhao, Yajing); Min, X (Min, Xin); Huang, ZH (Huang, Zhaohui); Liu, YG (Liu, Yan'gai); Wu, XW (Wu, Xiaowen); Fang, MH (Fang, Minghao)

来源出版物: ENERGY AND BUILDINGS 卷: 158 页: 1049-1062 DOI: 10.1016/j.enbuild.2017.10.078 出版年: JAN 1 2018

Web of Science 核心合集中的 "被引频次": 81

被引频次合计: 82

摘要: Shape-stable and high-thermal conductivity composite phase change materials (c-PCMs) composed of polyethylene glycol (PEG) and biological porous carbon (BPC) are investigated. BPC based on potatoes and white radishes are obtained by the carbonization method. The thermal conductivity of the BPC increases with the rising of the carbonization temperature due to the higher graphitization degree. Especially, BPC calcined at 1300 degrees C for 2 h resulted in the optimum PEG supporting matrix candidate, showing an attractive honeycomb-like microstructure. Calcination above 1300 degrees C results in the destruction of the shape. BPC/PEG c-PCMs are synthesized via a vacuum impregnation approach. PEG equally distributed in the matrix material with a mass fraction of 85.36% approximately and it could keep its morphological stability after heating at 80 degrees C for 40 h. Moreover, the highest thermal conductivity is 4.5 W/m K, which is about 10 times higher than the pristine PEG. Furthermore, no chemical interaction is found between the PEG and BPC. The melting and solidifying temperature, and enthalpy not vary upon a 200 thermal cycles test. This confirms the excellent chemical and structure stability for c-PCMs, which are within the most promising materials in the area of building heat preservation by being clean, energy-saving and recycled materials. (C) 2017 Elsevier B.V. All rights reserved.

入藏号: WOS:000428010300007

出版商: ELSEVIER SCIENCE SA

出版商地址: PO BOX 564, 1001 LAUSANNE, SWITZERLAND

Web of Science 类别: Construction & Building Technology; Energy & Fuels; Engineering, Civil

ISSN: 0378-7788

eISSN: 1872-6178

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 179 条，共 381 条

标题: Material composition, pore structure and adsorption capacity of low-rank coals around the first coalification jump: A case of eastern Junggar Basin, China

作者: Tao, S (Tao, Shu); Chen, SD (Chen, Shida); Tang, DZ (Tang, Dazhen); Zhao, X (Zhao, Xu); Xu, H (Xu, Hao); Li, S (Li, Song)

来源出版物: FUEL 卷: 211 页: 804-815 DOI: 10.1016/j.fuel.2017.09.087 出版年: JAN 1 2018

Web of Science 核心合集中的 "被引频次": 73

被引频次合计: 76

摘要: The first coalification jump (FCJ) has a significant impact on low-rank coal reservoir heterogeneity, and is of great importance for coalbed methane (CBM) development. Here, a series of experiments were performed for 10 coal samples collected from eastern Junggar Basin, to compare the material composition, pore structure and adsorption capacity of lignite and candle coal. Contrast with the candle coal, the lignite has a higher inertinite content, larger pore volume, better connectivity, and greater specific surface area (SSA). During the process of FCJ, the polycondensation of coal molecules and the compaction of coal matrix occur, leading to a rapid decline of moisture, porosity and permeability, and the cell wall in the candle coal is badly crushed with clay minerals filled from optical microscopy. In general, the larger total pore volume (1.7-300 nm, measured by N-2 adsorption) contributes to the larger SSA. The SSA of candle coal mainly comes from the contribution of micropore (< 10 nm), especially the 2-3 nm pores, while the micropore and transition pore (10-100 nm) contribute to most of SSA of lignite. However, though the SSA of the candle coal is largely lower than that of the lignite, the CH4 adsorption capacity tends to decrease from the lignite to the candle coal due to material composition difference. Low-field NMR was used to determine the pore and fracture system by analyzing the transverse relaxation time, which showed that only two obvious peaks could be identified in lignite and three peaks at about 0.25 ms, 30 ms and 200 ms are present in the candle coal. The fractal results indicate that the pore surface and complexity inside the coal increase gradually from lignite to candle coal. These observations could deepen awareness and understanding of low-rank coal reservoir heterogeneity and the influence of FCJ on reservoir property.

入藏号: WOS:000413449600080

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0016-2361

eISSN: 1873-7153

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 180 条，共 381 条

标题: Secure and Robust Fragile Watermarking Scheme for Medical Images

作者: Shehab, A (Shehab, Abdulaziz); Elhoseny, M (Elhoseny, Mohamed); Muhammad, K (Muhammad, Khan); Sangaiah, AK (Sangaiah, Arun Kumar); Yang, P (Yang, Po); Huang, HJ (Huang, Haojun); Hou, GL (Hou, Guolin)

来源出版物: IEEE ACCESS 卷: 6 页: 10269-10278 DOI: 10.1109/ACCESS.2018.2799240 出版年: 2018

Web of Science 核心合集中的 "被引频次": 81

被引频次合计: 83

摘要: Due to the advances in computer-based communication and health services over the past decade, the need for image security becomes urgent to address the requirements of both safety and non-safety in medical applications. This paper proposes a new fragile watermarking-based scheme for image authentication and self-recovery for medical applications. The proposed scheme locates image tampering as well as recovers the original image. A host image is broken into 4 x 4 blocks and singular value decomposition (SVD) is applied by inserting the traces of block wise SVD into the least significant bit of the image pixels to figure out the transformation in the original image. Two authentication bits namely block authentication and self-recovery bits are used to survive the vector quantization attack. The insertion of self-recovery bits is determined with Arnold transformation, which recovers the original image even after a high tampering rate. SVD-based watermarking information improves the image authentication and provides away to detect different attacked area of the watermarked image. The proposed scheme is tested against different types of attacks such as text removal attack, text insertion attack, and copy and paste attack. Compared with the state-of-the art methods, the proposed scheme greatly improves both tamper localization accuracy and the peak signal to noise ratio of self-recovered image.

入藏号: WOS:000427899900001

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Computer Science, Information Systems; Engineering, Electrical & Electronic; Telecommunications

ISSN: 2169-3536

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 181 条，共 381 条

标题: Visible-light-induced charge transfer pathway and photocatalysis mechanism on Bi semimetal@defective BiOBr hierarchical microspheres

作者: Dong, XA (Dong, Xing'an); Zhang, WD (Zhang, Wendong); Sun, YJ (Sun, Yanjuan); Li, JY (Li, Jieyuan); Cen, WL (Cen, Wanglai); Cui, ZH (Cui, Zhihao); Huang, HW (Huang, Hongwei); Dong, F (Dong, Fan)

来源出版物: JOURNAL OF CATALYSIS 卷: 357 页: 41-50 DOI: 10.1016/j.jcat.2017.10.004 出版年: JAN 2018

Web of Science 核心合集中的 "被引频次": 121

被引频次合计: 122

摘要: Charge transfer pathway and catalysis mechanism are two major issues in a specific catalytic reaction process. To further probe these two aspects of photocatalytic NO oxidation to address the environmental problem, Bi metal@defective BiOBr hierarchical microspheres were fabricated and used as a visible light photocatalyst. The interfacial and surface properties of Bi metal@defective BiOBr were optimized to understand the SPR effect of Bi metal and the oxygen vacancies (OVs) formed in situ. It was found that the charge transfer pathway on Bi metal@defective BiOBr has been significantly changed from that on pristine BiOBr. The Bi semimetal could act both as a charge transfer bridge and as a hot electron donor. The OVs induced the formation of an intermediate level in the band structure of BiOBr and promote O-2 activation and thus the generation of center dot O-2(-) species. Due to the synergistic effects of Bi metal and OVs, Bi metal@defective BiOBr demonstrated highly enhanced visible light photocatalytic performance for NO removal. The photocatalytic NO oxidation process has been monitored by in situ diffuse reflectance infrared Fourier transform spectroscopy (DRIFTS), which could reveal the reaction intermediate products accurately. On the basis of an investigation with in situ DRIFTS and the simulation of the electronic structure, a new photocatalysis mechanism involving Bi metal, OVs, and NO transformation was proposed. The perspectives on the charge transfer pathway and photocatalysis mechanism in the present work can be extended to other catalysts for tuning the interfacial properties and enhancing the photocatalytic performance to address environmental problems. (C) 2017 Elsevier Inc. All rights reserved.

入藏号: WOS:000424172500005

出版商: ACADEMIC PRESS INC ELSEVIER SCIENCE

出版商地址: 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA

Web of Science 类别: Chemistry, Physical; Engineering, Chemical

ISSN: 0021-9517

eISSN: 1090-2694

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 182 条，共 381 条

标题: Building Extraction in Very High Resolution Remote Sensing Imagery Using Deep Learning and Guided Filters

作者: Xu, YY (Xu, Yongyang); Wu, L (Wu, Liang); Xie, Z (Xie, Zhong); Chen, ZL (Chen, Zhanlong)

来源出版物: REMOTE SENSING 卷: 10 期: 1 文献号: 144 DOI: 10.3390/rs10010144 出版年: JAN 2018

Web of Science 核心合集中的 "被引频次": 105

被引频次合计: 112

摘要: Very high resolution (VHR) remote sensing imagery has been used for land cover classification, and it tends to a transition from land-use classification to pixel-level semantic segmentation. Inspired by the recent success of deep learning and the filter method in computer vision, this work provides a segmentation model, which designs an image segmentation neural network based on the deep residual networks and uses a guided filter to extract buildings in remote sensing imagery. Our method includes the following steps: first, the VHR remote sensing imagery is preprocessed and some hand-crafted features are calculated. Second, a designed deep network architecture is trained with the urban district remote sensing image to extract buildings at the pixel level. Third, a guided filter is employed to optimize the classification map produced by deep learning; at the same time, some salt-and-pepper noise is removed. Experimental results based on the Vaihingen and Potsdam datasets demonstrate that our method, which benefits from neural networks and guided filtering, achieves a higher overall accuracy when compared with other machine learning and deep learning methods. The method proposed shows outstanding performance in terms of the building extraction from diversified objects in the urban district.

入藏号: WOS:000424092300142

出版商: MDPI

出版商地址: ST ALBAN-ANLAGE 66, CH-4052 BASEL, SWITZERLAND

Web of Science 类别: Remote Sensing

eISSN: 2072-4292

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 183 条，共 381 条

标题: Shape-, size- and structure-controlled synthesis and biocompatibility of iron oxide nanoparticles for magnetic theranostics

作者: Xie, WS (Xie, Wensheng); Guo, ZH (Guo, Zhenhu); Gao, F (Gao, Fei); Gao, Q (Gao, Qin); Wang, D (Wang, Dan); Liaw, BS (Liaw, Bor-shuang); Cai, Q (Cai, Qiang); Sun, XD (Sun, Xiaodan); Wang, XM (Wang, Xiumei); Zhao, LY (Zhao, Lingyun)

来源出版物: THERANOSTICS 卷: 8 期: 12 页: 3284-3307 DOI: 10.7150/thno.25220 出版年: 2018

Web of Science 核心合集中的 "被引频次": 84

被引频次合计: 85

摘要: In the past decade, iron oxide nanoparticles (IONPs) have attracted more and more attention for their excellent physicochemical properties and promising biomedical applications. In this review, we summarize and highlight recent progress in the design, synthesis, biocompatibility evaluation and magnetic theranostic applications of IONPs, with a special focus on cancer treatment. Firstly, we provide an overview of the controlling synthesis strategies for fabricating zero-, one- and three-dimensional IONPs with different shapes, sizes and structures. Then, the in vitro and in vivo biocompatibility evaluation and biotranslocation of IONPs are discussed in relation to their chemo-physical properties including particle size, surface properties, shape and structure. Finally, we also highlight significant achievements in magnetic theranostic applications including magnetic resonance imaging (MRI), magnetic hyperthermia and targeted drug delivery. This review provides a background on the controlled synthesis, biocompatibility evaluation and applications of IONPs as cancer theranostic agents and an overview of the most up-to-date developments in this area.

入藏号: WOS:000432355000010

PubMed ID: 29930730

出版商: IVYSPRING INT PUBL

出版商地址: PO BOX 4546, LAKE HAVEN, NSW 2263, AUSTRALIA

Web of Science 类别: Medicine, Research & Experimental

ISSN: 1838-7640

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 184 条，共 381 条

标题: Supercritical Methane Diffusion in Shale Nanopores: Effects of Pressure, Mineral Types, and Moisture Content

作者: Wang, S (Wang, Sen); Feng, QH (Feng, Qihong); Zha, M (Zha, Ming); Javadpour, F (Javadpour, Farzam); Hu, QH (Hu, Qinhong)

来源出版物: ENERGY & FUELS 卷: 32 期: 1 页: 169-180 DOI: 10.1021/acs.energyfuels.7b02892 出版年: JAN 2018

Web of Science 核心合集中的 "被引频次": 57

被引频次合计: 57

摘要: Using molecular dynamics, we simulated the diffusion behavior of supercritical methane in shale nanopores composed of different matrix mineral types (organic matter, clay, and calcite). We studied the effects of pore size, pore pressure, and moisture content on the diffusion process. Our results show that confined methane molecules diffuse more rapidly with increases in pore size and temperature but diffuse slowly with an increase in pressure. Anisotropic diffusion behavior is also observed in directions parallel and perpendicular to the basal surfaces of nanoslits. We also found that mineral types composing the pore walls have a prominent effect on gas diffusion. The perfectly ordered structure and ultrasmooth surface of organic matter facilitate the transport of methane in dry pores, even though its adsorption capability is much stronger than that of inorganic minerals. Moisture inhibits methane diffusion, but this adverse effect is more evident in organic pores because water migrates in the form of cluster, which acts as a piston and severely impedes methane diffusion. However, only an adsorbed water membrane is present at the surfaces of inorganic materials, leading to a weaker impact on methane diffusion. Remarkably, the ratios of the self-diffusion coefficients of the confined fluid and bulk phases at different temperatures collapse onto a master curve dependent solely on the slit aperture. Therefore, we propose a mathematical model to facilitate up-scaling studies from atomistic computations to macroscale measurements. The findings of this study provides a better understanding of hydrocarbon transport through shale formation, which is fundamentally important for reliably predicting production performance and optimizing hydraulic-fracturing design.

入藏号: WOS:000423253200019

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0887-0624

eISSN: 1520-5029

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 185 条，共 381 条

标题: Single-unit-cell layer established Bi2WO6 3D hierarchical architectures: Efficient adsorption, photocatalysis and dye-sensitized photoelectrochemical performance

作者: Huang, HW (Huang, Hongwei); Cao, RR (Cao, Ranran); Yu, SX (Yu, Shixin); Xu, K (Xu, Kang); Hao, WC (Hao, Weichang); Wang, YG (Wang, Yonggang); Dong, F (Dong, Fan); Zhang, TR (Zhang, Tierui); Zhang, YH (Zhang, Yihe)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 219 页: 526-537 DOI: 10.1016/j.apcatb.2017.07.084 出版年: DEC 15 2017

Web of Science 核心合集中的 "被引频次": 161

被引频次合计: 162

摘要: Single-layer catalysis sparks huge interests and gains widespread attention owing to its high activity. Simultaneously, three-dimensional (3D) hierarchical structure can afford large surface area and abundant reactive sites, contributing to high efficiency. Herein, we report an absorbing single-unit-cell layer established Bi2WO6 3D hierarchical architecture fabricated by a sodium dodecyl benzene sulfonate (SDBS)-assisted assembled strategy. The DBS- long chains can adsorb on the (Bi2O2)(2+) layers and hence impede stacking of the layers, resulting in the single-unit-cell layer. We also uncovered that SDS with a shorter chain is less effective than SDBS. Due to the sufficient exposure of surface O atoms, single-unit-cell layer 3D Bi2WO6 shows strong selectivity for adsorption on multiform organic dyes with different charges. Remarkably, the single-unit-cell layer 3D Bi2WO6 casts profoundly enhanced photodegradation activity and especially a superior photocatalytic H-2 evolution rate, which is 14-fold increase in contrast to the bulk Bi2WO6. Systematic photoelectrochemical characterizations disclose that the substantially elevated carrier density and charge separation efficiency take responsibility for the strengthened photocatalytic performance. Additionally, the possibility of single-unit-cell layer 3D Bi2WO6 as dye-sensitized solar cells (DSSC) has also been attempted and it was manifested to be a promising dye-sensitized photoanode for oxygen evolution reaction (ORR). Our work not only furnish an insight into designing single-layer assembled 3D hierarchical architecture, but also offer a multi-functional material for environmental and energy applications. (C) 2017 Elsevier B.V. All rights reserved.

入藏号: WOS:000412957100055

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 186 条，共 381 条

标题: Well-designed 3D ZnIn2S4 nanosheets/TiO2 nanobelts as direct Z-scheme photocatalysts for CO2 photoreduction into renewable hydrocarbon fuel with high efficiency

作者: Yang, G (Yang, Guang); Chen, DM (Chen, Daimei); Ding, H (Ding, Hao); Feng, JJ (Feng, Jiejie); Zhang, JZ (Zhang, Jin Z.); Zhu, YF (Zhu, Yongfa); Hamid, S (Hamid, Saher); Bahnemann, DW (Bahnemann, Detlef W.)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 219 页: 611-618 DOI: 10.1016/j.apcatb.2017.08.016 出版年: DEC 15 2017

Web of Science 核心合集中的 "被引频次": 150

被引频次合计: 151

摘要: A 3-dimensional (3D) ZnIn2S4/TiO2 Z-scheme system has been designed and constructed for photocatalytic reduction of CO2 into renewable hydrocarbon fuels without the use of a solid-state electron mediator. The unique 3D morphology, achieved by assembling 2D ZnIn2S4 nanosheets onto 1D TiO2 nanobelts, not only provides large surface area but also improves the separation and transfer efficiency of photogenerated electrons and holes. The 3D ZnIn2S4/TiO2 Z-scheme photocatalysts show excellent light-harvesting properties demonstrated in photocatalytic reduction of CO2, resulting in generation of desired hydrocarbons. The CH4 production rate of the 3D ZnIn2S4/TiO2 can reach up to 1.135 mu mol g(-1) h(-1) which is about 39-times higher than that of bare ZnIn2S4 (0.029 mu mol g(-1) h(-1)). The enhanced photocatalytic activity is attributed to effective separation of the charge carriers between ZnIn2S4 and TiO2 through the direct Z-scheme instead of a type-II heterojunction. The photogenerated electrons in TiO2 nanobelts recombine with the holes in ZnIn2S4 nanosheets, and the unrecombined electrons/holes on different active sites have stronger reduction/oxidation abilities, leading to higher photocatalytic activity for CO2 reduction. (C) 2017 Published by Elsevier B.V.

入藏号: WOS:000412957100063

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 187 条，共 381 条

标题: Nonaqueous Hybrid Lithium-Ion and Sodium-Ion Capacitors

作者: Wang, HW (Wang, Huanwen); Zhu, CR (Zhu, Changrong); Chao, DL (Chao, Dongliang); Yan, QY (Yan, Qingyu); Fan, HJ (Fan, Hong Jin)

来源出版物: ADVANCED MATERIALS 卷: 29 期: 46 文献号: 1702093 DOI: 10.1002/adma.201702093 出版年: DEC 13 2017

Web of Science 核心合集中的 "被引频次": 237

被引频次合计: 244

摘要: Hybrid metal-ion capacitors (MICs) (M stands for Li or Na) are designed to deliver high energy density, rapid energy delivery, and long lifespan. The devices are composed of a battery anode and a supercapacitor cathode, and thus become a tradeoff between batteries and supercapacitors. In the past two decades, tremendous efforts have been put into the search for suitable electrode materials to overcome the kinetic imbalance between the batterytype anode and the capacitor-type cathode. Recently, some transition-metal compounds have been found to show pseudocapacitive characteristics in a nonaqueous electrolyte, which makes them interesting high-rate candidates for hybrid MIC anodes. Here, the material design strategies in Li-ion and Na-ion capacitors are summarized, with a focus on pseudocapacitive oxide anodes (Nb2O5, MoO3, etc.), which provide a new opportunity to obtain a higher power density of the hybrid devices. The application of Mxene as an anode material of MICs is also discussed. A perspective to the future research of MICs toward practical applications is proposed to close.

入藏号: WOS:000417490700028

PubMed ID: 28940422

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary; Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied; Physics, Condensed Matter

ISSN: 0935-9648

eISSN: 1521-4095

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 188 条，共 381 条

标题: Multi-step ahead wind speed forecasting using an improved wavelet neural network combining variational mode decomposition and phase space reconstruction

作者: Wang, DY (Wang, Deyun); Luo, HY (Luo, Hongyuan); Grunder, O (Grunder, Olivier); Lin, YB (Lin, Yanbing)

来源出版物: RENEWABLE ENERGY 卷: 113 页: 1345-1358 DOI: 10.1016/j.renene.2017.06.095 出版年: DEC 2017

Web of Science 核心合集中的 "被引频次": 79

被引频次合计: 81

摘要: Accurate wind speed forecasting is crucial to reliable and secure power generation system. However, the intermittent and unstable nature of wind speed makes it very difficult to be predicted accurately. This paper proposes a novel hybrid model based on variational mode decomposition (VMD), phase space reconstruction (PSR) and wavelet neural network optimized by genetic algorithm (GAWNN) for multi-step ahead wind speed forecasting. In the proposed model, VMD is firstly applied to disassemble the original wind speed series into a number of components in order to improve the overall prediction accuracy. Then, the multi-step ahead forecasting for each component is conducted using GAWNN model in which the input-output sample pairs are determined by PSR technique. Finally, the ultimate forecast series of wind speed is obtained by aggregating the forecast result of each component. The proposed model is tested using two real-world wind speed series collected respectively in spring and autumn from a wind farm located in Xinjiang, China. The experimental results show that the proposed model outperforms all other comparison models including persistence method, PSR-BPNN, PSR-WNN, PSR-GAWNN and EEMD-PSR-GAWNN models adopted in this paper, which demonstrates that the proposed model has superior performances for multi-step ahead wind speed forecasting. (C) 2017 Elsevier Ltd. All rights reserved.

入藏号: WOS:000407655300120

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Green & Sustainable Science & Technology; Energy & Fuels

ISSN: 0960-1481

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 189 条，共 381 条

标题: Oxygen Vacancy Promoted Heterogeneous Fenton-like Degradation of Ofloxacin at pH 3.2-9.0 by Cu Substituted Magnetic Fe3O4@FeOOH Nanocomposite

作者: Jin, H (Jin, Hang); Tian, XK (Tian, Xike); Nie, YL (Nie, Yulun); Zhou, ZX (Zhou, Zhaoxin); Yang, C (Yang, Chao); Li, Y (Li, Yong); Lu, LQ (Lu, Liqiang)

来源出版物: ENVIRONMENTAL SCIENCE & TECHNOLOGY 卷: 51 期: 21 页: 12699-12706 DOI: 10.1021/acs.est.7b04503 出版年: NOV 7 2017

Web of Science 核心合集中的 "被引频次": 92

被引频次合计: 95

摘要: To develop an ultraefficient and reusable heterogeneous Fenton-like catalyst at a wide working pH range is a great challenge for its application in practical water treatment. We report an oxygen vacancy promoted heterogeneous Fenton-like reaction mechanism and an unprecedented ofloxacin (OFX) degradation efficiency of Cu doped Fe3O4@FeOOH magnetic nanocomposite. Without the aid of external energy, OFX was always completely removed within 30 min at pH 3.2-9.0. Compared with Fe3O4@ FeOOH, the pseudo-first-order reaction constant was enhanced by 10 times due to Cu substitution (9.04/h vs 0.94/h). Based on the X-ray photoelectron spectroscopy (XPS), Raman analysis, and the investigation of H2O2 decomposition, (OH)-O-center dot generation, pH effect on OFX removal and H2O2 utilization efficiency, the new formed oxygen vacancy from in situ Fe substitution by Cu rather than promoted Fe3+/Fe2+ cycle was responsible for the ultraefficiency of Cu doped Fe3O4@FeOOH at neutral and even alkaline pHs. Moreover, the catalyst had an excellent long-term stability and could be easily recovered by magnetic separation, which would not cause secondary pollution to treated water.

入藏号: WOS:000414887200073

PubMed ID: 28934546

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Engineering, Environmental; Environmental Sciences

ISSN: 0013-936X

eISSN: 1520-5851

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 190 条，共 381 条

标题: An extended reciprocally convex matrix inequality for stability analysis of systems with time-varying delay

作者: Zhang, CK (Zhang, Chuan-Ke); He, Y (He, Yong); Jiang, L (Jiang, Lin); Wu, M (Wu, Min); Wang, QG (Wang, Qing-Guo)

来源出版物: AUTOMATICA 卷: 85 页: 481-485 DOI: 10.1016/j.automatica.2017.07.056 出版年: NOV 2017

Web of Science 核心合集中的 "被引频次": 127

被引频次合计: 128

摘要: The reciprocally convex combination lemma (RCCL) is an important technique to develop stability criteria for the systems with a time-varying delay. This note develops an extended reciprocally convex matrix inequality, which reduces the estimation gap of the RCCL-based matrix inequality and reduces the number of decision variables of the recently proposed delay-dependent RCCL. A stability criterion of a linear time delay system is established through the proposed matrix inequality. Finally, a numerical example is given to demonstrate the advantage of the proposed method. (C) 2017 Elsevier Ltd. All rights reserved.

入藏号: WOS:000414818100054

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Automation & Control Systems; Engineering, Electrical & Electronic

ISSN: 0005-1098

eISSN: 1873-2836

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 191 条，共 381 条

标题: Geodynamics of heterogeneous gold mineralization in the North China Craton and its relationship to lithospheric destruction

作者: Li, SR (Li, Sheng-Rong); Santosh, M (Santosh, M.)

来源出版物: GONDWANA RESEARCH 卷: 50 特刊: SI 页: 267-292 DOI: 10.1016/j.gr.2017.05.007 出版年: OCT 2017

Web of Science 核心合集中的 "被引频次": 78

被引频次合计: 89

摘要: The North China Craton (NCC) hosts some of the world-class gold deposits on the globe, which can be classified into distinct types as the "Jiaodong type", explosive breccia type and slcarn type. The "Jiaodong type" gold deposits were formed at ca. 120-130 Ma both in the margins and interior of the NCC, Two explosive breccia gold deposits formed at ac. 180 Ma and 120 Ma and are located in the southern margin and the interior of the NCC. Important skarn gold deposits of ca. 128 Ma formed within the interior of the NCC. Although the formation and distribution of these gold deposits are temporally and spatially heterogeneous, they are commonly related with the litho spheric destruction of the NCC. The interplay of several factors such as basement architecture, inhomogeneous decratonization, crust-mantle interaction, mantle dynamics, magmatic characteristics, high heat flow and massive flux of deep-derived ore-forming fluids operated in generating the gold endowment. All the three types of gold systems are closely related with granitoid plutons and different types of dykes, the magmas for which were sourced from the lower crust near the Moho discontinuity and involved the mixing and mingling of felsic and mafic magmas. The ore forming fluids display prominent magmatic signature and were largely derived from deep domains, with probable input from the asthenosphere mantle. The heterogeneous distribution of the giant gold systems in the NCC was geodynarnically controlled by the destruction of the craton. The regions at the confluence of two or three Precambrian micro-continental-blocks are generally characterized by thinned lithosphere and high heat flow, constituting the potential sites of giant gold deposits. The mantle beneath these regions shows EM2 characteristics implying the involvement of subducted oceanic components. The magmatic intrusions associated with the gold systems crystallized under high oxygen fugacity conditions and were rich in volatiles. (C) 2017 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000416499100010

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 192 条，共 381 条

标题: The Columbia supercontinent revisited

作者: Meert, JG (Meert, Joseph G.); Santosh, M (Santosh, M.)

来源出版物: GONDWANA RESEARCH 卷: 50 特刊: SI 页: 67-83 DOI: 10.1016/j.gr.2017.04.011 出版年: OCT 2017

Web of Science 核心合集中的 "被引频次": 78

被引频次合计: 78

摘要: Just over 15 years ago, a proposal forwarded by Rogers and Santosh (2002) posited the existence of a pre-Rodinia supercontinent which they called Columbia. The conjecture invigorated research into the Paleo-Mesoproterozoic interval that was; in our opinion, inappropriately dubbed 'the boring billion'. Given the wealth of new information about the supercontinent, this review paper takes a careful look at the paleomagnetic evidence that is used to reconstruct Columbia. Our contribution represents a status report and indicates that; despite the exponential increase in available data, knowledge of the assembly, duration and breakup history of the supercontinent are contentious. The commonality of similar to 1.7-2.1 Ga orogenic systems around the globe are indicative of major changes in paleogeography and growth of larger landmasses. There is continued discussion about the interconnectedness of those orogenic systems in a global picture. Arguments for Columbia posit a similar to 1500-1400 Ma age for maximum packing. Paleomagnetic data from many of the constituent cratons during the 1500-1400 Ma interval can be interpreted to support a large landmass, but the consistency of the proposal cannot be reliably demonstrated for earlier or later times. One of the more intriguing advances are the apparent long-lived connections between Laurentia, Siberia and Baltica that may have formed the core of both Columbia and Rodinia. (C) 2017 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000416499100004

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 193 条，共 381 条

标题: Tectonic evolution, superimposed orogeny, and composite metallogenic system in China

作者: Deng, J (Deng, Jun); Wang, QF (Wang, Qingfei); Li, GJ (Li, Gongjian)

来源出版物: GONDWANA RESEARCH 卷: 50 特刊: SI 页: 216-266 DOI: 10.1016/j.gr.2017.02.005 出版年: OCT 2017

Web of Science 核心合集中的 "被引频次": 125

被引频次合计: 138

摘要: Continental China is a mosaic of numerous tectonic blocks, which amalgamated from Neoarchean to Cenozoic broadly coeval with the cycles of global supercontinents such as Kenorland, Columbia, Rodinia, Gondwana, and Pangaea. By reviewing the long-lasting geological evolution in the different tectonic blocks, it reveals that more than two episodes of tectonic events, including accretionary and collisional orogeny, and dismantling, as well as mantle plume, occurred successively or simultaneously within a single tectonic belt. This is called superimposed orogeny in this study. Examples of the dominant types of superimposed orogeny in China include: (1) Cenozoic continental collision superimposed on Paleo- to Mesozoic accretionary orogeny in the Tibet and Sanjiang orogenic belts; (2) Reactivation of Paleozoic accretionary orogen in later Mesozoic oceanic subduction in the eastern part of Qinling-Qilian-Kunlun and Central Asian orogenic belts; (3) Mesozoic oceanic subduction under the paleo-suture in the South China Block; (4) Mesozoic demantling along the Paleo- and Neoproterozoic, and Paleozoic sutures in the eastern part of North China Craton; and (5) mantle plume rising through metasomatized lithospheric mantle or stagnant oceanic slab in the Emeishan large igneous province. A comprehensive review of the spatial-temporal distribution of ore deposits and their salient features shows that the superimposed orogeny has exerted significant control on metallogeny in China. The giant porphyry and skarnore deposits, as well as orogenic gold deposits were preferentially formed along previous tectonic suture, craton margin, and arc during later orogenesis due to the remobilization of previously enriched metals. Superimposed orogeny has reworked the lithospheric structure with concomitant granitoid-associated metallogeny. The mixing of magmas from juvenile lower crust, ancient lower crust, and middle crust, which tends to induce the different mineralization of Cu-Au, Mo, and Pb-Zn-W-Sn deposits respectively, was considered to generate a wide variety of combinations of metal species. The superimposed orogeny caused the overlapping of diverse genetic types of deposit formed in different tectonic periods in the same tectono-metallogenic belt. The stratiform ore deposit, including BIF, VMS, SEDEX, or sedimentary sulfide layers, formed from Neoarchean to Paleozoic, were modified by later mineralization, resulting in the enrichment of the various metal species and enhancement of ore resources. This study brings up the concept of composite metallogenic system to summarize the regional metallogeny driven by superimposed orogeny. The composite metallogenic system was dominantly characterized by the multi-episodic and diverse mineralization concomitant with one or more features, including mineralization evolved from the previous metal enrichment, later overlapping or modification on previous ore belt, and diversifying of metal species derived from reworked lithosphere. (C) 2017 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000416499100009

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 194 条，共 381 条

标题: Notes on Stability of Time-Delay Systems: Bounding Inequalities and Augmented Lyapunov-Krasovskii Functionals

作者: Zhang, CK (Zhang, Chuan-Ke); He, Y (He, Yong); Jiang, L (Jiang, Lin); Wu, M (Wu, Min)

来源出版物: IEEE TRANSACTIONS ON AUTOMATIC CONTROL 卷: 62 期: 10 页: 5331-5336 DOI: 10.1109/TAC.2016.2635381 出版年: OCT 2017

Web of Science 核心合集中的 "被引频次": 104

被引频次合计: 106

摘要: The bounding inequalities and the LyapunovKrasovskii functionals (LKFs) are important for the stability analysis of time-delay systems. Much attention has been paid to develop tighter inequalities for improving stability criteria, while the contribution of the LKFs has not been considered when discussing the relationship between the tightness of inequalities and the conservatism of criteria. This note is concerned with this issue. Firstly, it is proved that, when a simple LKF is applied, the stability criteria obtained by the Wirtinger-based inequality and the Jensen inequality are equivalent although the Wirtinger-based inequality is tighter. It means that the tighter inequality does not always lead to a less conservative criterion. Secondly, it is found that a suitable augmented LKF with necessary integral vectors in its derivative is required to achieve the advantage of the Wirtingerbased inequality. Based on this observation, two delay-producttype terms are introduced into the LKF to establish new stability criteria. Finally, a numerical example is given to verify the equivalence statements and to show the benefit of the proposed criteria.

入藏号: WOS:000412429600040

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Automation & Control Systems; Engineering, Electrical & Electronic

ISSN: 0018-9286

eISSN: 1558-2523

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 195 条，共 381 条

标题: Stability Analysis of Discrete-Time Neural Networks With Time-Varying Delay via an Extended Reciprocally Convex Matrix Inequality

作者: Zhang, CK (Zhang, Chuan-Ke); He, Y (He, Yong); Jiang, L (Jiang, Lin); Wang, QG (Wang, Qing-Guo); Wu, M (Wu, Min)

来源出版物: IEEE TRANSACTIONS ON CYBERNETICS 卷: 47 期: 10 特刊: SI 页: 3040-3049 DOI: 10.1109/TCYB.2017.2665683 出版年: OCT 2017

Web of Science 核心合集中的 "被引频次": 98

被引频次合计: 100

摘要: This paper is concerned with the stability analysis of discrete-time neural networks with a time-varying delay. Assessment of the effect of time delays on system stability requires suitable delay-dependent stability criteria. This paper aims to develop new stability criteria for reduction of conservatism without much increase of computational burden. An extended reciprocally convex matrix inequality is developed to replace the popular reciprocally convex combination lemma (RCCL). It has potential to reduce the conservatism of the RCCL-based criteria without introducing any extra decision variable due to its advantage of reduced estimation gap using the same decision variables. Moreover, a delay-product-type term is introduced for the first time into the Lyapunov function candidate such that a delay-variation-dependent stability criterion with the bounds of delay change rate is established. Finally, the advantages of the proposed criteria are demonstrated through two numerical examples.

入藏号: WOS:000409311800007

PubMed ID: 28222008

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Automation & Control Systems; Computer Science, Artificial Intelligence; Computer Science, Cybernetics

ISSN: 2168-2267

eISSN: 2168-2275

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 196 条，共 381 条

标题: Recent advances in interfacial engineering of perovskite solar cells

作者: Ye, MD (Ye, Meidan); He, CF (He, Chunfeng); Iocozzia, J (Iocozzia, James); Liu, XQ (Liu, Xueqin); Cui, X (Cui, Xun); Meng, XT (Meng, Xiangtong); Rager, M (Rager, Matthew); Hong, XD (Hong, Xiaodan); Liu, XY (Liu, Xiangyang); Lin, ZQ (Lin, Zhiqun)

来源出版物: JOURNAL OF PHYSICS D-APPLIED PHYSICS 卷: 50 期: 37 文献号: 373002 DOI: 10.1088/1361-6463/aa7cb0 出版年: SEP 20 2017

Web of Science 核心合集中的 "被引频次": 91

被引频次合计: 91

摘要: Due to recent developments, organometallic halide perovskite solar cells (PSCs) have attracted even greater interest owing to their impressive photovoltaic properties and simple device manufacturing processes with the potential for commercial applications. The power conversion efficiencies (PCEs) of PSCs have surged from 3.8% for methyl ammonium lead halide-sensitized liquid solar cells, CH3NH3PbX3 (X = Cl, Br, I), in 2009, to more than 22% for all-solid-state solar cells in 2016. Over the past few years, significant effort has been dedicated to realizing PSCs with even higher performance. In this review, recent advances in the interfacial engineering of PSCs are addressed. The specific strategies for the interfacial engineering of PSCs fall into two categories: (1) solvent treatment and additives to improve the light-harvesting capabilities of perovskite films, and (2) the incorporation of various functional materials at the interfaces between the active layers (e.g. electron transporting layer, perovskite layer, and hole transporting layer). This review aims to provide a comprehensive overview of strategies for the interfacial engineering of PSCs with potential benefits including enhanced light harvesting, improved charge separation and transport, improved device stability, and elimination of photocurrent hysteresis.

入藏号: WOS:000408227100002

出版商: IOP PUBLISHING LTD

出版商地址: TEMPLE CIRCUS, TEMPLE WAY, BRISTOL BS1 6BE, ENGLAND

Web of Science 类别: Physics, Applied

ISSN: 0022-3727

eISSN: 1361-6463

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 197 条，共 381 条

标题: Macroscopic Polarization Enhancement Promoting Photo- and Piezoelectric-Induced Charge Separation and Molecular Oxygen Activation

作者: Huang, HW (Huang, Hongwei); Tu, SC (Tu, Shuchen); Zeng, C (Zeng, Chao); Zhang, TR (Zhang, Tierui); Reshak, AH (Reshak, Ali H.); Zhang, YH (Zhang, Yihe)

来源出版物: ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 卷: 56 期: 39 页: 11860-11864 DOI: 10.1002/anie.201706549 出版年: SEP 18 2017

Web of Science 核心合集中的 "被引频次": 506

被引频次合计: 506

摘要: Efficient photo- and piezoelectric-induced molecular oxygen activation are both achieved by macroscopic polarization enhancement on a noncentrosymmetric piezoelectric semiconductor BiOIO3. The replacement of V5+ ions for I5+ in IO3 polyhedra gives rise to strengthened macroscopic polarization of BiOIO3, which facilitates the charge separation in the photocatalytic and piezoelectric catalytic process, and renders largely promoted photo- and piezoelectric induced reactive oxygen species (ROS) evolution, such as superoxide radicals (O-.(2)-) and hydroxyl radicals ((OH)-O-.). This work advances piezoelectricity as a new route to efficient ROS generation, and also discloses macroscopic polarization engineering on improvement of multi-responsive catalysis.

入藏号: WOS:000410810600033

PubMed ID: 28731229

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary

ISSN: 1433-7851

eISSN: 1521-3773

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 198 条，共 381 条

标题: Self-assembly of exfoliated molybdenum disulfide (MoS2) nanosheets and layered double hydroxide (LDH): Towards reducing fire hazards of epoxy

作者: Zhou, KQ (Zhou, Keqing); Gao, R (Gao, Rui); Qian, XD (Qian, Xiaodong)

来源出版物: JOURNAL OF HAZARDOUS MATERIALS 卷: 338 页: 343-355 DOI: 10.1016/j.jhazmat.2017.05.046 出版年: SEP 15 2017

Web of Science 核心合集中的 "被引频次": 98

被引频次合计: 101

摘要: In present study, LDH/MoS2 hybrids were facilely prepared by self-assembly of exfoliated MoS2 nanosheets and LDH via electrostatic force. The structure and morphology of the LDH/MoS2 hybrids were characterized and then introduced into epoxy for reducing its fire hazards. Compared with single MoS2, LDH/MoS2 hybrids showed a more homogeneous dispersion in the epoxy matrix and no obvious agglomerates were observed. Compared with MoS2, the addition of LDH/MoS2 hybrids endowed more excellent fire resistance to epoxy matrix, which was reflected by the significantly reduced peak heat release rate, total heat release and total smoke production. A rational flame retardant mode of action for LDH/MoS2 hybrids was proposed based on the analysis of pyrolysis fragments and char residues. (C) 2017 Elsevier B.V. All rights reserved.

入藏号: WOS:000405972800036

PubMed ID: 28595156

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Environmental; Environmental Sciences

ISSN: 0304-3894

eISSN: 1873-3336

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 199 条，共 381 条

标题: Template-free precursor-surface-etching route to porous, thin g-C3N4 nanosheets for enhancing photocatalytic reduction and oxidation activity

作者: Huang, HW (Huang, Hongwei); Xiao, K (Xiao, Ke); Tian, N (Tian, Na); Dong, F (Dong, Fan); Zhang, TR (Zhang, Tierui); Du, X (Du, Xin); Zhang, YH (Zhang, Yihe)

来源出版物: JOURNAL OF MATERIALS CHEMISTRY A 卷: 5 期: 33 页: 17452-17463 DOI: 10.1039/c7ta04639a 出版年: SEP 7 2017

Web of Science 核心合集中的 "被引频次": 182

被引频次合计: 183

摘要: Metal-free graphitic carbon nitride (g-C3N4) has sparked considerable interest due to its efficient photocatalytic activity in many fields. Development of new tactics toward improving the photocatalytic performance of g-C3N4 remains active and challenging. In this study, we uncover an unprecedented template-free precursor (melamine) pre-treatment protocol to achieve porous g-C3N4 nanosheets for efficient photocatalytic reduction and oxidation reaction. The introduction of thiourea solution in the hydrothermal pre-treatment process etches the surface of melamine, thus yielding the porous, thin g-C3N4 nanosheets. The microstructure and porosity of g-C3N4 can be adjusted only by controlling the thiourea amount. The as-obtained porous g-C3N4 nanosheets are found to be endowed with not only increased specific surface area, but also enhanced photoabsorption in the visible light region. Systematic characterizations of the charge movement behavior (transient photocurrent, linear sweep voltammetry, electrochemical impedance spectra, photoluminescence and surface photovoltage spectroscopy) disclose that the separation of photogenerated charge carriers is remarkably boosted by fabricating such a porous nanosheet structure. Benefiting from these advantages, porous g-C3N4 nanosheets present profoundly enhanced visible-light photocatalytic performance for H-2 evolution (3.3-fold increase) and NO removal from the gaseous phase (5.5 times increase) in contrast to the pristine bulk g-C3N4. Our current study may offer an alternative approach to designing high-performance g-C3N4 nanomaterials for energy and environmental applications.

入藏号: WOS:000408267300033

出版商: ROYAL SOC CHEMISTRY

出版商地址: THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS, ENGLAND

Web of Science 类别: Chemistry, Physical; Energy & Fuels; Materials Science, Multidisciplinary

ISSN: 2050-7488

eISSN: 2050-7496

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 200 条，共 381 条

标题: Investigation on the pore structure and multifractal characteristics of tight oil reservoirs using NMR measurements: Permian Lucaogou Formation in Jimusaer Sag, Junggar Basin

作者: Zhao, PQ (Zhao, Peiqiang); Wang, ZL (Wang, Zhenlin); Sun, ZC (Sun, Zhongchun); Cai, JC (Cai, Jianchao); Wang, L (Wang, Liang)

来源出版物: MARINE AND PETROLEUM GEOLOGY 卷: 86 页: 1067-1081 DOI: 10.1016/j.marpetgeo.2017.07.011 出版年: SEP 2017

Web of Science 核心合集中的 "被引频次": 98

被引频次合计: 100

摘要: Pore structure is a critical parameter to estimate the reservoir quality and evaluate the resource potential. However, the pore structure and heterogeneity of the unconventional tight oil reservoirs of Permian Lucaogou Formation of Jimusaer Sag, Junggar Basin are not studied well. In this paper, the multifractal analysis based on the NMR T-2 distributions was applied to investigate the pore structure and heterogeneity. The reservoir quality index (RQI) and flow zone indicator (FZI) were calculated using porosity and permeability. Two parameters T-35 and T-50 were newly defined as relaxation times corresponding to the 35% and 50% saturation on the T-2 reverse accumulative curve, respectively. The results showed that the RQI, and FZI values were extremely low, and that the NMR T-2 distributions of water saturated samples had much short relaxation components with no or little long relaxation components, indicating a complex and poor microscopic pore structure of tight oil rocks. The typical multifractal characteristics, such as the large values of singularity strength range (Delta alpha), revealed that the pore structures of samples were strongly heterogeneous. It was also found that the clay contents have an obvious influence on the multifractal parameters, and the FZI and new defined T-35 are two good indicators for heterogeneity of pore structure. In addition, the feasibility and applicability of calculating the multifractal parameters from NMR and other well logs were discussed. (C) 2017 Elsevier Ltd. All rights reserved.

入藏号: WOS:000411296600064

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0264-8172

eISSN: 1873-4073

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 201 条，共 381 条

标题: Electrical conductivity models in saturated porous media: A review

作者: Cai, JC (Cai, Jianchao); Wei, W (Wei, Wei); Hu, XY (Hu, Xiangyun); Wood, DA (Wood, David A.)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 171 页: 419-433 DOI: 10.1016/j.earscirev.2017.06.013 出版年: AUG 2017

Web of Science 核心合集中的 "被引频次": 83

被引频次合计: 85

摘要: Electrical transport properties of saturated porous media, such as soils, rocks and fractured networks, typically composed of a non-conductive solid matrix and a conductive brine in the pore space, have numerous applications in reservoir engineering and petrophysics. One of the widely used electrical conductivity models is the empirical Archie's law that has a practical application in well-log interpretation of reservoir rocks. The Archie equation does not take into account the contributions of clay minerals, isolated porosity, heterogeneity in grains and pores and their distributions, as well as anisotropy. In the literature, either some modifications were presented to apply Archie's law to tight and clay-rich reservoirs or more modern models were developed to describe electrical conductivity in such reservoirs. In the former, a number of empirically derived parameters were proposed, which typically vary from one reservoir to another. In the latter, theoretical improvements by including detailed characteristics of pore space morphology led to developing more complex electrical conductivity models. Such models enabled us to address the electrical properties in a wider range of potential reservoir rocks through theoretical parameters related to key reservoir-defining petrophysical properties. This paper presents a review of the electrical conductivity models developed using fractal, percolation and effective medium theories. Key results obtained by comparing experiential and theoretical models with experiments/simulations, as well as advantages and drawbacks of each model are analyzed. Approaches to obtaining more reasonable electrical conductivity models are discussed. Experiments suggest more complex relationships between electrical conductivity and porosity than experiential models, particularly in low-porosity formations. However, the available theoretical models combined with simulations do provide insight to how microscale physics affects macroscale electrical conductivity in porous media.

入藏号: WOS:000408289500019

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 202 条，共 381 条

标题: Precursor-reforming protocol to 3D mesoporous g-C3N4 established by ultrathin self-doped nanosheets for superior hydrogen evolution

作者: Tian, N (Tian, Na); Zhang, YH (Zhang, Yihe); Li, XW (Li, Xiaowei); Xiao, K (Xiao, Ke); Du, X (Du, Xin); Dong, F (Dong, Fan); Waterhouse, GIN (Waterhouse, Geoffrey I. N.); Zhang, TR (Zhang, Tierui); Huang, HW (Huang, Hongwei)

来源出版物: NANO ENERGY 卷: 38 页: 72-81 DOI: 10.1016/j.nanoen.2017.05.038 出版年: AUG 2017

Web of Science 核心合集中的 "被引频次": 316

被引频次合计: 322

摘要: Graphitic carbon nitride (g-C3N4) has attracted enormous research attention as a promising low cost, visible-light driven semiconductor photocatalyst. However, low photoabsorption efficiencies and unsatisfactory charge separation limit the potential of g-C3N4 in many applications, motivating attempts to manipulate the structure and electronic properties of g-C3N4 to achieve improved performance. Here we describe a novel precursor-reforming strategy that ultimately affords 3D mesoporous ultrathin g-C3N4 with superior photocatalytic performance compared to conventional calcination-derived g-C3N4. We demonstrate that during hydrothermal treatment of melamine and urea, melamine undergoes an irreversible monoclinic to orthorhombic phase transformation, and the additive urea (excess typically 3-fold) serves as an additional N source and porogen. Calcination of the orthorhombic melamine yields mesoporous g-C3N4 with enhanced photoabsorption properties and an outstanding photoactivity. A 23-fold increased hydrogen evolution rate of 3579 mu mol h(-1) g(-1) (lambda > 420 nm) was achieved with an apparent quantum efficiency (AQE) of 27.8% at 420 +/- 15 nm, a level of performance far beyond any AQE previously reported for ultrathin/porous/doped g-C3N4 photocatalyst. Our work conclusively demonstrates a new synthetic strategy towards high performance g-C3N4-based photocatalytic materials for energy applications.

入藏号: WOS:000405202800010

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied

ISSN: 2211-2855

eISSN: 2211-3282

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 203 条，共 381 条

标题: 3D-3D porous Bi2WO6/graphene hydrogel composite with excellent synergistic effect of adsorption-enrichment and photocatalytic degradation

作者: Yang, JJ (Yang, Jinjin); Chen, DM (Chen, Daimei); Zhu, Y (Zhu, Yi); Zhang, YM (Zhang, Yuanming); Zhu, YF (Zhu, Yongfa)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 205 页: 228-237 DOI: 10.1016/j.apcatb.2016.12.035 出版年: MAY 15 2017

Web of Science 核心合集中的 "被引频次": 142

被引频次合计: 146

摘要: A novel visible-light 3D-3D Bi2WO6/graphene hydrogel (BWO/GH) photocatalyst with the synergistic effect of adsorption and photocatalysis has been successfully synthesized by a facile one-step hydrothermal method and is applied in environment remediation. 3D porous graphene hydrogel, in which 3D-structured flower-like BWO as an efficient photocatalyst is homogenously distributed, not only exhibits the great absorption toward the organic pollution, but also provides multidimensional quality and electron transfer channels. The 3D-3D structure of BWO/GH composite is beneficial to light refraction and reflection, which highly improves the utilization rate of light. The synergistic effect of the 3D-3D BWO/GH composite greatly enhanced the removal rates of organic pollutants and it is ease of separation and recycling in water purification. The removal rate of methylene blue (MB) by BWO/GH composite is about 2.3 times as that of the pure BWO in static systems, and the removal rates of MB and 2, 4-dichlorophenol (2, 4-CDP) are about 1.3 and 3 times as these of the pure BWO in dynamic system. When the irradiation time lasted for 74h, the removal rate of MB is nearly unchanged and still kept at 36.1%, indicating that the 3D BWO/GH composite has a high stability. The construction of BWO/GH composite resolved the adsorption saturation problem of GH and improved the photocatalytic activity of BWO, thus greatly improved the removal rate of water pollutants. (C) 2016 Elsevier B.V. All rights reserved.

入藏号: WOS:000393931000024

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 204 条，共 381 条

标题: Learning from class-imbalanced data: Review of methods and applications

作者: Guo, HX (Guo Haixiang); Li, YJ (Li Yijing); Shang, J (Shang, Jennifer); Gu, MY (Gu Mingyun); Huang, YY (Huang Yuanyue); Bing, G (Bing, Gong)

来源出版物: EXPERT SYSTEMS WITH APPLICATIONS 卷: 73 页: 220-239 DOI: 10.1016/j.eswa.2016.12.035 出版年: MAY 1 2017

Web of Science 核心合集中的 "被引频次": 357

被引频次合计: 376

摘要: Rare events, especially those that could potentially negatively impact society, often require humans' decision-making responses. Detecting rare events can be viewed as a prediction task in data mining and machine learning communities. As these events are rarely observed in daily life, the prediction task suffers from a lack of balanced data. In this paper, we provide an in depth review of rare event detection from an imbalanced learning perspective. Five hundred and seventeen related papers that have been published in the past decade were collected for the study. The initial statistics suggested that rare events detection and imbalanced learning are concerned across a wide range of research areas from management science to engineering. We reviewed all collected papers from both a technical and a practical point of view. Modeling methods discussed include techniques such as data preprocessing, classification algorithms and model evaluation. For applications, we first provide a comprehensive taxonomy of the existing application domains of imbalanced learning, and then we detail the applications for each category. Finally, some suggestions from, the reviewed papers are incorporated with our experiences and judgments to offer further research directions for the imbalanced learning and rare event detection fields. (C) 2016 Elsevier Ltd. All rights reserved.

入藏号: WOS:000394632200016

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Computer Science, Artificial Intelligence; Engineering, Electrical & Electronic; Operations Research & Management Science

ISSN: 0957-4174

eISSN: 1873-6793

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 205 条，共 381 条

标题: Chlorine intercalation in graphitic carbon nitride for efficient photocatalysis

作者: Liu, CY (Liu, Chengyin); Zhang, YH (Zhang, Yihe); Dong, F (Dong, Fan); Reshak, AH (Reshak, A. H.); Ye, LQ (Ye, Liqun); Pinna, N (Pinna, Nicola); Zeng, C (Zeng, Chao); Zhang, TR (Zhang, Tierui); Huang, HW (Huang, Hongwei)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 203 页: 465-474 DOI: 10.1016/j.apcatb.2016.10.002 出版年: APR 2017

Web of Science 核心合集中的 "被引频次": 171

被引频次合计: 172

摘要: Metal-free graphitic carbon nitride (g-C3N4) shows tremendous potentials in energy and environmental domains. Nonetheless, amelioration on the crystal configuration, electronic structure and microstructure of g-C3N4 for high-performing visible-light photocatalysis is still challenging and anticipated. Here we report the development of chlorine (Cl) intercalated g-C3N4 via co-pyrolysis of melamine and excessive ammonium chloride (excessive is very pivotal). This protocol renders not only Cl intercalation in the interlayer of g-C3N4, but also a homogeneous porous structure, thereby endowing g-C3N4 with multiple superiority effects, including significantly promoted charge migration by establishing interlayer pathway, up-shifted conduction-band level, narrowed band gap as well as enhanced surface area. The as-prepared CI intercalated mesoporous g-C3N4 parades outstanding photocatalytic performance for water splitting into H-2, CO2 reduction, liquid and air contaminants removal. The most enhanced photocatalytic performance was obtained at Cl-C3N4-3 for H-2 evolution activity, which shows a 19.2-fold increase in contrast to pristine g-C3N4, accompanying with a high apparent quantum efficiency of 11.9% at 420 +/- 15 nm. Experimental and OFT calculations results co-disclose that the aforementioned advantageous factors account for the profoundly boosted photooxidation and photoreduction capabilities of g-C3N4 under visible light. The present work may furnish a bottom-up tactic for integrally advancing g-C3N4, and also hold huge promise to be extended to other layered materials for photochemical or photoelectrochemical applications. (C) 2016 Elsevier B.V. All rights reserved.

入藏号: WOS:000390965000045

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 206 条，共 381 条

标题: Rational design on 3D hierarchical bismuth oxyiodides via in situ self-template phase transformation and phase-junction construction for optimizing photocatalysis against diverse contaminants

作者: Huang, HW (Huang, Hongwei); Xiao, K (Xiao, Ke); Zhang, TR (Zhang, Tierui); Dong, F (Dong, Fan); Zhang, YH (Zhang, Yihe)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 203 页: 879-888 DOI: 10.1016/j.apcatb.2016.10.082 出版年: APR 2017

Web of Science 核心合集中的 "被引频次": 180

被引频次合计: 181

摘要: Design of three-dimensional (3D) hierarchical architectures and nano-phase-junctions are of huge significance for semiconductor photocatalysis. Herein, we report the fabrication of a series of 3D hierarchical bismuth oxyiodides via in situ phase transformation and phase-junction construction utilizing BiOI microspheres as self-sacrificed template through a facile calcination strategy. The multiform bismuth oxyiodides obtained at different temperatures include hierarchical BiOI, Bi4O5I2, Bi4O5I2-Bi5O7I phase junction and Bi5O7I. These bismuth oxyiodides exhibit very distinct microstructure and band structure, and their photoabsorption was orderly tuned from 700 to 400 nm, rendering the adjustable oxidation and reduction ability of band energy levels. The photocatalytic activity of the bismuth oxyiodide series is systematically assessed by degradation of diverse antibiotic and contaminants, such as tetracycline hydrochloride, bisphenol A (BPA) and azo dye Rhodamine B (RhB). It disclosed that they present discrepant photocatalytic performance with activity order of Bi4O5I2-Bi5O7I>Bi4O5I2 > Bi5O7I > BiOI, which is closely associated with the charge separation efficiency, band structure and surface area. Additionally, the photocatalytic mechanism and degradation pathway are also surveyed. The study may furnish new insights into development of novel 3D hierarchical architectures and nano-phase-junctions for heterogeneous photocatalysis. (C) 2016 Elsevier B.V. All rights reserved.

入藏号: WOS:000390965000087

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 207 条，共 381 条

标题: FRACTAL CHARACTERIZATION OF DYNAMIC FRACTURE NETWORK EXTENSION IN POROUS MEDIA

作者: Cai, JC (Cai, Jianchao); Wei, W (Wei, Wei); Hu, XY (Hu, Xiangyun); Liu, RC (Liu, Richeng); Wang, JJ (Wang, Jinjie)

来源出版物: FRACTALS-COMPLEX GEOMETRY PATTERNS AND SCALING IN NATURE AND SOCIETY 卷: 25 期: 2 文献号: 1750023 DOI: 10.1142/S0218348X17500232 出版年: APR 2017

Web of Science 核心合集中的 "被引频次": 99

被引频次合计: 101

摘要: Fracture network and fractured porous media as well as their transport properties have received great attentions in many fields from engineering application and basic theoretical researches. Fracture will dynamically extend in length and aperture to form complex fracture network under some external conditions such as percussion drilling, wave propagation, desiccation and hydrofracturing. The complexity of fracture network can be well quantitatively characterized by fractal dimension. In this work, the dynamic characterization of fracture network extension in porous media under drying process is measured by the improved box-counting technique, and fractal dimensions of fracture network are respectively related to drying time, average aperture, moisture content and fracture porosity. The fractal dimension increases exponentially with drying time and average aperture, and decreases with moisture content in the form of power law. Specially, the fractal dimension is approximatively increased with porosity in the form of linearity in a narrow porosity range. The transport capacity of fracture network, described by seepage coefficient, is also related to the fractal dimension with drying time in the form of exponential function. The presented fractal analysis of fracture network could also shed light on the hydrofracturing application in subsurface unconventional oil and gas reservoirs.

入藏号: WOS:000399394500012

出版商: WORLD SCIENTIFIC PUBL CO PTE LTD

出版商地址: 5 TOH TUCK LINK, SINGAPORE 596224, SINGAPORE

Web of Science 类别: Mathematics, Interdisciplinary Applications; Multidisciplinary Sciences

ISSN: 0218-348X

eISSN: 1793-6543

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 208 条，共 381 条

标题: A survey of swarm intelligence for dynamic optimization: Algorithms and applications

作者: Mavrovouniotis, M (Mavrovouniotis, Michalis); Li, CH (Li, Changhe); Yang, SX (Yang, Shengxiang)

来源出版物: SWARM AND EVOLUTIONARY COMPUTATION 卷: 33 页: 1-17 DOI: 10.1016/j.swevo.2016.12.005 出版年: APR 2017

Web of Science 核心合集中的 "被引频次": 162

被引频次合计: 171

摘要: Swarm intelligence (SI) algorithms, including ant colony optimization, particle swarm optimization, bee inspired algorithms, bacterial foraging optimization, firefly algorithms, fish swarm optimization and many more, have been. proven to be good methods to address difficult optimization problems under stationary environments. Most SI algorithms have been developed to address stationary optimization problems and hence, they can converge on the (near-) optimum solution efficiently. However, many real-world problems have a dynamic environment that changes over time. For such dynamic optimization problems (DOPs), it is difficult for a conventional SI algorithm to track the changing optimum once the algorithm has converged on a solution. In the last two decades, there has been a growing interest of addressing DOPs using SI algorithms due to their adaptation capabilities. This paper presents a broad review on Si dynamic optimization (SIDO) focused on several classes of problems, such as discrete, continuous, constrained, multi-objective and classification problems, and real-world applications. In addition, this paper focuses on the enhancement strategies integrated in SI algorithms to address dynamic changes, the performance measurements and benchmark generators used in SIDO. Finally, some considerations about future directions in the subject are given.

入藏号: WOS:000395613200001

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Computer Science, Artificial Intelligence; Computer Science, Theory & Methods

ISSN: 2210-6502

eISSN: 2210-6510

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 209 条，共 381 条

标题: Characteristics of pore structure and fractal dimension of low-rank coal: A case study of Lower Jurassic Xishanyao coal in the southern Junggar Basin, NW China

作者: Fu, HJ (Fu, Haijiao); Tang, DZ (Tang, Dazhen); Xu, T (Xu, Ting); Xu, H (Xu, Hao); Tao, S (Tao, Shu); Li, S (Li, Song); Yin, ZY (Yin, ZhenYong); Chen, BL (Chen, Baoli); Zhang, C (Zhang, Cheng); Wang, LL (Wang, Linlin)

来源出版物: FUEL 卷: 193 页: 254-264 DOI: 10.1016/j.fuel.2016.11.069 出版年: APR 1 2017

Web of Science 核心合集中的 "被引频次": 109

被引频次合计: 113

摘要: In this study, a series of laboratory experiments were performed to firstly analyze the characteristics of the pore structure in low-rank coal (R-o < 0.70%), and then relationships between fractal dimensions and coal rank, coal composition and pore structure, and their impacts on methane adsorbability and seepage ability were studied too. The desorption isotherms of low-rank coal mainly belongs to Type B, which are primarily caused by ink-bottle-shaped and narrow-slit pores that are good for coalbed methane (CBM) enrichment, but bad for seepage. The seepage pores are dominated by primary plant macropores (>1000 nm), with a poor development of mesopores (100-1000 nm). The fractal features of adsorbed pores and seepage pores were defined and calculated using fractal dimensions D-2 (2.563-2.926) and D-4 (2.683-3.263), respectively. D-2 has a positive correlation with moisture content, while D-4 has a positive correlation with Ro and fixed carbon and a negative correlation with the volatile content. Both D-2 and D-4 have a weaker association with the ash yield and no apparent relationship with coal macerals, indicating that coal-forming materials and environments have little influence on the pore structure fractal characteristics. D-2 has a strongly correlation with the BET surface area (R-2 = 0.9026) and the average pore diameter (R-2 = 0.9841), again proving that D-2 can be used to characterize the pore structure fractal dimension of adsorbed pores. D-2 shows a negative correlation with the Langmuir volume (VI), but no apparent relationship with the Langmuir pressure (P-L), indicating that the pore structure of absorbed pores has little effect on methane desorption during the process of CBM exploitation. D-4 has weak positive correlation with permeability. Overall, fractal analysis is beneficial for better understanding the pore structure, methane adsorbability and seepage ability of low-rank coal. (C) 2016 Elsevier Ltd. All rights reserved.

入藏号: WOS:000393004800027

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0016-2361

eISSN: 1873-7153

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 210 条，共 381 条

标题: Multi-step ahead electricity price forecasting using a hybrid model based on two-layer decomposition technique and BP neural network optimized by firefly algorithm

作者: Wang, DY (Wang, Deyun); Luo, HY (Luo, Hongyuan); Grunder, O (Grunder, Olivier); Lin, YB (Lin, Yanbing); Guo, HX (Guo, Haixiang)

来源出版物: APPLIED ENERGY 卷: 190 页: 390-407 DOI: 10.1016/j.apenergy.2016.12.134 出版年: MAR 15 2017

Web of Science 核心合集中的 "被引频次": 117

被引频次合计: 122

摘要: In the deregulated competitive electricity market, the price which reflects the relationship between electricity supply and demand is one of the most important elements, making it crticial for all market participants to precisely forecast the electricity price. However, electricity price series usually has complex features such as non-linearity, non-stationarity and volatility, which makes the price forecasting turn out to be very difficult. In order to improve the accuracy of electricity price forecasting, this paper first proposes a two-layer decomposition technique and then develops a hybrid model based on fast ensemble empirical mode decomposition (FEEMD), variational mode decomposition (VMD) and back propagation (BP) neural network optimized by firefly algorithm (FA). The proposed model is unique in the sense that VMD is specifically applied to further decompose the high frequency intrinsic mode functions (IMFs) generated by FEEMD into a number of modes in order to improve the forecast accuracy. To validate the effectiveness and accuracy of the proposed model, three electricity price series respectively collected from the real-world electricity markets of Australia and France are adopted to conduct the empirical study. The results indicate that the proposed model outperforms the other considered models over horizons of one-step, two-step, four-step and six-step ahead forecasting, which shows that the proposed model has superior performances for both one-step and multi-step ahead forecasting of electricity price. (C) 2016 Elsevier Ltd. All rights reserved.

入藏号: WOS:000395959100033

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0306-2619

eISSN: 1872-9118

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 211 条，共 381 条

标题: Fe-based catalysts for heterogeneous catalytic ozonation of emerging contaminants in water and wastewater

作者: Wang, JL (Wang, Jianlong); Bai, ZY (Bai, Zhiyong)

来源出版物: CHEMICAL ENGINEERING JOURNAL 卷: 312 页: 79-98 DOI: 10.1016/j.cej.2016.11.118 出版年: MAR 15 2017

Web of Science 核心合集中的 "被引频次": 200

被引频次合计: 207

摘要: Catalytic ozonation utilizes catalysts to improve the decomposition of ozone and the formation of hydroxyl radicals, which can overcome some disadvantages of ozonation. Fe-based materials are widely used as catalysts for heterogeneous catalytic ozonation due to their easy preparation, excellent catalytic performance and the abundance of Fe in nature. In this paper, the performances of Various Fe-based catalysts, including Fe-0-derived, FeOOH-derived, Fe2O3-derived, Fe3O4-derived and iron oxides composite, their preparation and characterization methods were briefly introduced. The catalytic ozonation using Fe based catalysts for the degradation of various emerging contaminants, such as pesticides and herbicides, pharmaceuticals, phthalic acid esters, dyes, nitrobenzenes, phenols, as well as for the treatment of actual wastewater was summarized. The main influencing factors on catalytic ozonation of toxic organic pollutants were discussed, and their potential applications and perspectives were proposed. (C) 2016 Elsevier B.V. All rights reserved.

入藏号: WOS:000392768500009

出版商: ELSEVIER SCIENCE SA

出版商地址: PO BOX 564, 1001 LAUSANNE, SWITZERLAND

Web of Science 类别: Engineering, Environmental; Engineering, Chemical

ISSN: 1385-8947

eISSN: 1873-3212

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 212 条，共 381 条

标题: The assembly of Rodinia: The correlation of early Neoproterozoic (ca. 900 Ma) high-grade metamorphism and continental arc formation in the southern Beishan Orogen, southern Central Asian Orogenic Belt (CAOB)

作者: Zong, KQ (Zong, Keqing); Klemd, R (Klemd, Reiner); Yuan, Y (Yuan, Yu); He, ZY (He, Zhenyu); Guo, JL (Guo, Jingliang); Shi, XL (Shi, Xiaoli); Liu, YS (Liu, Yongsheng); Hu, ZC (Hu, Zhaochu); Zhang, ZM (Zhang, Zeming)

来源出版物: PRECAMBRIAN RESEARCH 卷: 290 页: 32-48 DOI: 10.1016/j.precamres.2016.12.010 出版年: MAR 2017

Web of Science 核心合集中的 "被引频次": 137

被引频次合计: 190

摘要: An early extensive Neoproterozoic (ca. 900 Ma) continental magmatic arc system covering hundreds of kilometers has been reported to occur in the South Beishan Orogenic Belt (SBOB) and the Central Tianshan (CTA) in the southern Central Asian Orogenic Belt (CAOB). However, evidence for coeval high-grade metamorphism and thus the formation of an accretionary orogen in the framework of Rodinia is ambiguous or absent. This study provides new petrological, geochemical and geochronological data for garnet-bearing schists (quartz + garnet + biotite + plagioclase +/- muscovite) from the SBOB in order to constrain its Neoproterozoic metamorphic history. The metamorphic zircon rims are either unzoned or display sector zoning in CL-images and reveal REE patterns with flat HREE patterns and negative Eu anomalies, which are interpreted to be in chemical equilibrium with garnet and plagioclase. The zircon U-Pb dating yields concordant U-Pb ages of 900 +/- 3 Ma, 897 +/- 2 Ma and 898 +/- 4 Ma for the metamorphic zircon rims. The inherited detrital zircon cores of one sample display a concordant U-Pb age of 1397 +/- 5 Ma that is consistent with the timing of formation for the extensive Mesoproterozoic continental arc in the SBOB and CTA. Based on phase equilibrium geothermobarometry and average P-T thermobarometric calculations, minimum amphibolite-facies P-T conditions are estimated to be >600 degrees C at pressure >0.6 GPa, which is thought to have been overprinted by subsequent Paleozoic metamorphism. However, the Ti-in-zircon thermometer still reveals temperatures of up to 840 C using the composition of metamorphic zircon rims, suggesting former ca. 900 Ma granulite-facies peak metamorphic temperatures. The combined petrological and geochronological evidence in conjunction with the continental affinity of the regional metamorphic rocks suggests that the SBOB and the eastern CTA experienced an early Neoproterozoic accretionary orogenesis during the final assembly stage of Rodinia. (C) 2017 Elsevier B.V. All rights reserved.

入藏号: WOS:000394475100003

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0301-9268

eISSN: 1872-7433

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 213 条，共 381 条

标题: Hidden hyperchaos and electronic circuit application in a 5D self-exciting homopolar disc dynamo

作者: Wei, ZC (Wei, Zhouchao); Moroz, I (Moroz, Irene); Sprott, JC (Sprott, J. C.); Akgul, A (Akgul, Akif); Zhang, W (Zhang, Wei)

来源出版物: CHAOS 卷: 27 期: 3 文献号: 033101 DOI: 10.1063/1.4977417 出版年: MAR 2017

Web of Science 核心合集中的 "被引频次": 95

被引频次合计: 96

摘要: We report on the finding of hidden hyperchaos in a 5D extension to a known 3D self-exciting homopolar disc dynamo. The hidden hyperchaos is identified through three positive Lyapunov exponents under the condition that the proposed model has just two stable equilibrium states in certain regions of parameter space. The new 5D hyperchaotic self-exciting homopolar disc dynamo has multiple attractors including point attractors, limit cycles, quasi-periodic dynamics, hidden chaos or hyperchaos, as well as coexisting attractors. We use numerical integrations to create the phase plane trajectories, produce bifurcation diagram, and compute Lyapunov exponents to verify the hidden attractors. Because no unstable equilibria exist in two parameter regions, the system has a multistability and six kinds of complex dynamic behaviors. To the best of our knowledge, this feature has not been previously reported in any other high-dimensional system. Moreover, the 5D hyperchaotic system has been simulated using a specially designed electronic circuit and viewed on an oscilloscope, thereby confirming the results of the numerical integrations. Both Matlab and the oscilloscope outputs produce similar phase portraits. Such implementations in real time represent a new type of hidden attractor with important consequences for engineering applications. Published by AIP Publishing.

入藏号: WOS:000395388300002

PubMed ID: 28364747

出版商: AMER INST PHYSICS

出版商地址: 1305 WALT WHITMAN RD, STE 300, MELVILLE, NY 11747-4501 USA

Web of Science 类别: Mathematics, Applied; Physics, Mathematical

ISSN: 1054-1500

eISSN: 1089-7682

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 214 条，共 381 条

标题: Black-carbon absorption enhancement in the atmosphere determined by particle mixing state

作者: Liu, DT (Liu, Dantong); Whitehead, J (Whitehead, James); Alfarra, MR (Alfarra, M. Rami); Reyes-Villegas, E (Reyes-Villegas, Ernesto); Spracklen, DV (Spracklen, Dominick V.); Reddington, CL (Reddington, Carly L.); Kong, SF (Kong, Shaofei); Williams, PI (Williams, Paul I.); Ting, YC (Ting, Yu-Chieh); Haslett, S (Haslett, Sophie); Taylor, JW (Taylor, Jonathan W.); Flynn, MJ (Flynn, Michael J.); Morgan, WT (Morgan, William T.); McFiggans, G (McFiggans, Gordon); Coe, H (Coe, Hugh); Allan, JD (Allan, James D.)

来源出版物: NATURE GEOSCIENCE 卷: 10 期: 3 页: 184-U132 DOI: 10.1038/NGEO2901 出版年: MAR 2017

Web of Science 核心合集中的 "被引频次": 129

被引频次合计: 130

摘要: Atmospheric black carbon makes an important but poorly quantified contribution to the warming of the global atmosphere. Laboratory and modelling studies have shown that the addition of non-black-carbon materials to black-carbon particles may enhance the particles' light absorption by 50 to 60% by refracting and reflecting light. Real-world experimental evidence for this 'lensing' effect is scant and conflicting, showing that absorption enhancements can be less than 5% or as large as 140%. Here we present simultaneous quantifications of the composition and optical properties of individual atmospheric black-carbon particles. We show that particles with a mass ratio of non-black carbon to black carbon of less than 1.5, which is typical of fresh traffic sources, are best represented as having no absorption enhancement. In contrast, black-carbon particles with a ratio greater than 3, which is typical of biomass-burning emissions, are best described assuming optical lensing leading to an absorption enhancement. We introduce a generalized hybrid model approach for estimating scattering and absorption enhancements based on laboratory and atmospheric observations. We conclude that the occurrence of the absorption enhancement of black-carbon particles is determined by the particles' mass ratio of non-black carbon to black carbon.

入藏号: WOS:000395791400009

出版商: NATURE PUBLISHING GROUP

出版商地址: 75 VARICK ST, 9TH FLR, NEW YORK, NY 10013-1917 USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1752-0894

eISSN: 1752-0908

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 215 条，共 381 条

标题: Detecting Hidden Chaotic Regions and Complex Dynamics in the Self-Exciting Homopolar Disc Dynamo

作者: Wei, ZC (Wei, Zhouchao); Moroz, I (Moroz, Irene); Sprott, JC (Sprott, Julien Clinton); Wang, Z (Wang, Zhen); Zhang, W (Zhang, Wei)

来源出版物: INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS 卷: 27 期: 2 文献号: 1730008 DOI: 10.1142/S0218127417300087 出版年: FEB 2017

Web of Science 核心合集中的 "被引频次": 49

被引频次合计: 50

摘要: In 1979, Moffatt pointed out that the conventional treatment of the simplest self-exciting homopolar disc dynamo has inconsistencies because of the neglect of induced azimuthal eddy currents, which can be resolved by introducing a segmented disc dynamo. Here we return to the simple dynamo system proposed by Moffatt, and demonstrate previously unknown hidden chaotic attractors. Then we study multistability and coexistence of three types of attractors in the autonomous dynamo system in three dimensions: equilibrium points, limit cycles and hidden chaotic attractors. In addition, the existence of two homoclinic orbits is proved rigorously by the generalized Melnikov method. Finally, by using Poincare compactification of polynomial vector fields in three dimensions, the dynamics near infinity of singularities is obtained.

入藏号: WOS:000397284700004

出版商: WORLD SCIENTIFIC PUBL CO PTE LTD

出版商地址: 5 TOH TUCK LINK, SINGAPORE 596224, SINGAPORE

Web of Science 类别: Mathematics, Interdisciplinary Applications; Multidisciplinary Sciences

ISSN: 0218-1274

eISSN: 1793-6551

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 216 条，共 381 条

标题: Delay-dependent stability analysis of neural networks with time-varying delay: A generalized free-weighting-matrix approach

作者: Zhang, CK (Zhang, Chuan-Ke); He, Y (He, Yong); Jiang, L (Jiang, Lin); Lin, WJ (Lin, Wen-Juan); Wu, M (Wu, Min)

来源出版物: APPLIED MATHEMATICS AND COMPUTATION 卷: 294 页: 102-120 DOI: 10.1016/j.amc.2016.08.043 出版年: FEB 1 2017

Web of Science 核心合集中的 "被引频次": 116

被引频次合计: 119

摘要: This paper investigates the delay-dependent stability problem of continuous neural networks with a bounded time-varying delay via Lyapunov-Krasovskii functional (LKF) method. This paper focuses on reducing the conservatism of stability criteria by estimating the derivative of the LKF more accurately. Firstly, based on several zero-value equalities, a generalized free-weighting-matrix (GFWM) approach is developed for estimating the single integral term. It is also theoretically proved that the GFWM approach is less conservative than the existing methods commonly used for the same task. Then, the GFWM approach is applied to investigate the stability of delayed neural networks, and several stability criteria are derived. Finally, three numerical examples are given to verify the advantages of the proposed criteria. (C) 2016 Elsevier Inc. All rights reserved.

入藏号: WOS:000385515100008

出版商: ELSEVIER SCIENCE INC

出版商地址: 360 PARK AVE SOUTH, NEW YORK, NY 10010-1710 USA

Web of Science 类别: Mathematics, Applied

ISSN: 0096-3003

eISSN: 1873-5649

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 217 条，共 381 条

标题: Noble metal-metal oxide nanohybrids with tailored nanostructures for efficient solar energy conversion, photocatalysis and environmental remediation

作者: Liu, XQ (Liu, Xueqin); Iocozzia, J (Iocozzia, James); Wang, Y (Wang, Yang); Cui, X (Cui, Xun); Chen, YH (Chen, Yihuang); Zhao, SQ (Zhao, Shiqiang); Li, Z (Li, Zhen); Lin, ZQ (Lin, Zhiqun)

来源出版物: ENERGY & ENVIRONMENTAL SCIENCE 卷: 10 期: 2 页: 402-434 DOI: 10.1039/c6ee02265k 出版年: FEB 1 2017

Web of Science 核心合集中的 "被引频次": 409

被引频次合计: 415

摘要: The controlled synthesis of nanohybrids composed of noble metals (Au, Ag, Pt and Pd, as well as AuAg alloy) and metal oxides (ZnO, TiO2, Cu2O and CeO2) have received considerable attention for applications in photocatalysis, solar cells, drug delivery, surface enhanced Raman spectroscopy and many other important areas. The overall architecture of nanocomposites is one of the most important factors dictating the physical properties of nanohybrids. Noble metals can be coupled to metal oxides to yield diversified nanostructures, including noble metal decorated-metal oxide nanoparticles (NPs), nanoarrays, noblemetal/metal oxide core/shell, noble metal/metal oxide yolk/shell and Janus noble metal-metal oxide nanostructures. In this review, we focus on the significant advances in tailored nanostructures of noble metal-metal oxide nanohybrids. The improvement in performance in the representative solar energy conversion applications including photocatalytic degradation of organic pollutants, photocatalytic hydrogen generation, photocatalytic CO2 reduction, dye-sensitized solar cells (DSSCs) and perovskite solar cells (PSCs) are discussed. Finally, we conclude with a perspective on the future direction and prospects of these controllable nanohybrid materials.

入藏号: WOS:000395679100002

出版商: ROYAL SOC CHEMISTRY

出版商地址: THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS, ENGLAND

Web of Science 类别: Chemistry, Multidisciplinary; Energy & Fuels; Engineering, Chemical; Environmental Sciences

ISSN: 1754-5692

eISSN: 1754-5706

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 218 条，共 381 条

标题: Recent developments on fractal-based approaches to nanofluids and nanoparticle aggregation

作者: Cai, JC (Cai, Jianchao); Hu, XY (Hu, Xiangyun); Xiao, BQ (Xiao, Boqi); Zhou, YF (Zhou, Yingfang); Wei, W (Wei, Wei)

来源出版物: INTERNATIONAL JOURNAL OF HEAT AND MASS TRANSFER 卷: 105 页: 623-637 DOI: 10.1016/j.ijheatmasstransfer.2016.10.011 出版年: FEB 2017

Web of Science 核心合集中的 "被引频次": 104

被引频次合计: 105

摘要: The properties of nanoparticles and its aggregation as well as convective heat transfer of nanofluids have received great attentions over the last few decades. It is well certified that nanoparticles and its aggregation can be successfully described by fractal theory and technology. In this review, the fractal properties of nanoparticle and its aggregation are firstly introduced, and then the recent investigations on the fractal models and fractal-based approaches that applied for effective thermal conductivity, convective heat transfer, critical heat flux and subcooled pool boiling of nanofluids, fractal clusters and yield stress property of nanoparticle aggregation are summarized. (C) 2016 Elsevier Ltd. All rights reserved.

入藏号: WOS:000389556800056

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Thermodynamics; Engineering, Mechanical; Mechanics

ISSN: 0017-9310

eISSN: 1879-2189

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 219 条，共 381 条

标题: Carbonized Cotton Fabric for High-Performance Wearable Strain Sensors

作者: Zhang, MC (Zhang, Mingchao); Wang, CY (Wang, Chunya); Wang, HM (Wang, Huimin); Jian, MQ (Jian, Muqiang); Hao, XY (Hao, Xiangyang); Zhang, YY (Zhang, Yingying)

来源出版物: ADVANCED FUNCTIONAL MATERIALS 卷: 27 期: 2 文献号: 1604795 DOI: 10.1002/adfm.201604795 出版年: JAN 2017

Web of Science 核心合集中的 "被引频次": 180

被引频次合计: 182

摘要: Recent years have witnessed the booming development of flexible strain sensors. To date, it is still a great challenge to fabricate strain sensors with both large workable strain range and high sensitivity. Cotton is an abundant supplied natural material composed of cellulose fibers and has been widely used for textiles and clothing. In this work, the fabrication of highly sensitive wearable strain sensors based on commercial plain weave cotton fabric, which is the most popular fabric for clothes, is demonstrated through a low-cost and scalable process. The strain sensors based on carbonized cotton fabric exhibit fascinating performance, including large workable strain range (> 140%), superior sensitivity (gauge factor of 25 in strain of 0%-80% and that of 64 in strain of 80%-140%), inconspicuous drift, and long-term stability, simultaneously offering advantages of low cost and simplicity in device fabrication and versatility in applications. Notably, the strain sensor can detect a subtle strain of as low as 0.02%. Based on its superior performance, its applications in monitoring both vigorous and subtle human motions are demonstrated, showing its tremendous potential for applications in wearable electronics and intelligent robots.

入藏号: WOS:000391923000019

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary; Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied; Physics, Condensed Matter

ISSN: 1616-301X

eISSN: 1616-3028

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 220 条，共 381 条

标题: A holistic low carbon city indicator framework for sustainable development

作者: Tan, S (Tan, Sieting); Yang, J (Yang, Jin); Yan, JY (Yan, Jinyue); Lee, C (Lee, Chewtin); Hashim, H (Hashim, Haslenda); Chen, B (Chen, Bin)

来源出版物: APPLIED ENERGY 卷: 185 特刊: SI 页: 1919-1930 DOI: 10.1016/j.apenergy.2016.03.041 子辑: 2 出版年: JAN 1 2017

Web of Science 核心合集中的 "被引频次": 78

被引频次合计: 81

摘要: Many cities are pursuing the low-carbon practices to reduce CO2 and other environmental emissions. However, it is still unclear which aspects a low-carbon city (LCC) covers and how to quantify and certify its low carbon level. In this paper, an indicator framework for the evaluation of LCC was established from the perspectives of Economic, Energy pattern, Social and Living, Carbon and Environment, Urban mobility, Solid waste, and Water. A comprehensive evaluation method was employed for LCC ranking by using the entropy weighting factor method. The benchmark values for LCC certification were also identified. The framework was applied to 10 global cities to rank their low-carbon levels. The comparison of cities at different levels of economic, social, and environmental development enhances the holistic of the study. The results showed that Stockholm, Vancouver, and Sydney ranked higher than the benchmark value, indicating these cities achieved a high level of low-carbon development. Sao Paulo, London, and Mexico City are still in the slow transition towards LCC. Beijing and New York each has much lower LCC level than the benchmark value due to the poor environmental performance and infrastructure supports caused by intensive human activities. The proposed indicator system serves as a guideline for the standardization of LCC and further identifies the key aspects of low-carbon management for different cities. (C) 2016 Elsevier Ltd. All rights reserved.

入藏号: WOS:000390494800093

会议名称: 7th International Conference on Applied Energy (ICAE)

会议日期: MAR 28-31, 2015

会议地点: Abu Dhabi, U ARAB EMIRATES

会议赞助商: Malardalen Univ, Abu Dhabi Educ Council, Appl Energy Innovat Inst, Abu Dhabi Convent Bur, Collaborat Innovat Ctr Elect Vehicle

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0306-2619

eISSN: 1872-9118

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 221 条，共 381 条

标题: Occurrence and risk assessment of antibiotics in surface water and groundwater from different depths of aquifers: A case study at Jianghan Plain, central China

作者: Yao, LL (Yao, Linlin); Wang, YX (Wang, Yanxin); Tong, L (Tong, Lei); Deng, YM (Deng, Yamin); Li, YG (Li, Yonggang); Gan, YQ (Gan, Yiqun); Guo, W (Guo, Wei); Dong, CJ (Dong, Chuangju); Duan, YH (Duan, Yanhua); Zhao, K (Zhao, Ke)

来源出版物: ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY 卷: 135 页: 236-242 DOI: 10.1016/j.ecoenv.2016.10.006 出版年: JAN 2017

Web of Science 核心合集中的 "被引频次": 93

被引频次合计: 105

摘要: The occurrence of 14 antibiotics (fluoroquinolones, tetracyclines, macrolides and sulfonamides) in groundwater and surface water at Jianghan Plain was investigated during three seasons. The total concentrations of target compounds in the water samples were higher in spring than those in summer and winter. Erythromycin was the predominant antibiotic in surface water samples with an average value of 1.60 mu g/L, 0.772 mu g/L and 0.546 mu g/L respectively in spring, summer and winter. In groundwater samples, fluoroquinolones and tetracyclines accounted for the dominant proportion of total antibiotic residues. The vertical distributions of total antibiotics in groundwater samples from three different depths boreholes (10 m, 25 m, and 50 m) exhibited irregular fluctuations. Consistently decreasing of antibiotic residues with increasing of depth was observed in four (G01, G02, G03 and G05) groundwater sampling sites over three seasons. However, at the sampling sites G07 and G08, the pronounced high concentrations of total antibiotic residues were detected in water samples from 50 m deep boreholes instead of those at upper aquifer in winter sampling campaign, with the total concentrations of 0.201 mu g/L and 0.100 mu g/L respectively. The environmental risks posed by the 14 antibiotics were assessed by using the methods of risk quotient and mixture risk quotient for algae, daphnids and fish in surface water and groundwater. The results suggested that algae might be the aquatic organism most sensitive to the antibiotics, with the highest risk levels posed by erythromycin in surface water and by ciprofloxacin in groundwater among the 14 antibiotics. In addition, the comparison between detected antibiotics in groundwater samples and the reported effective concentrations of antibiotics on denitrification by denitrifying bacteria, indicating this biogeochemical process driven by microorganisms won't be inhibitory influenced by the antibiotic residues in groundwater.

入藏号: WOS:000389555000029

PubMed ID: 27744193

出版商: ACADEMIC PRESS INC ELSEVIER SCIENCE

出版商地址: 525 B ST, STE 1900, SAN DIEGO, CA 92101-4495 USA

Web of Science 类别: Environmental Sciences; Toxicology

ISSN: 0147-6513

eISSN: 1090-2414

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 222 条，共 381 条

标题: Single Image Super-Resolution via Locally Regularized Anchored Neighborhood Regression and Nonlocal Means

作者: Jiang, JJ (Jiang, Junjun); Ma, X (Ma, Xiang); Chen, C (Chen, Chen); Lu, T (Lu, Tao); Wang, ZY (Wang, Zhongyuan); Ma, JY (Ma, Jiayi)

来源出版物: IEEE TRANSACTIONS ON MULTIMEDIA 卷: 19 期: 1 页: 15-26 DOI: 10.1109/TMM.2016.2599145 出版年: JAN 2017

Web of Science 核心合集中的 "被引频次": 90

被引频次合计: 95

摘要: The goal of learning-based image super resolution (SR) is to generate a plausible and visually pleasing high-resolution (HR) image from a given low-resolution (LR) input. The SR problem is severely underconstrained, and it has to rely on examples or some strong image priors to reconstruct the missing HR image details. This paper addresses the problem of learning the mapping functions (i.e., projection matrices) between the LR and HR images based on a dictionary of LR and HR examples. Encouraged by recent developments in image prior modeling, where the state-of-the-art algorithms are formed with nonlocal self-similarity and local geometry priors, we seek an SR algorithm of similar nature that will incorporate these two priors into the learning from LR space to HR space. The nonlocal self-similarity prior takes advantage of the redundancy of similar patches in natural images, while the local geometry prior of the data space can be used to regularize the modeling of the nonlinear relationship between LR and HR spaces. Based on the above two considerations, we first apply the local geometry prior to regularize the patch representation, and then utilize the nonlocal means filter to improve the super-resolved outcome. Experimental results verify the effectiveness of the proposed algorithm compared with the state-of-the-art SR methods.

入藏号: WOS:000391475200002

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Computer Science, Information Systems; Computer Science, Software Engineering; Telecommunications

ISSN: 1520-9210

eISSN: 1941-0077

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 223 条，共 381 条

标题: Raising the Gangdese Mountains in southern Tibet

作者: Zhu, DC (Zhu, Di-Cheng); Wang, Q (Wang, Qing); Cawood, PA (Cawood, Peter A.); Zhao, ZD (Zhao, Zhi-Dan); Mo, XX (Mo, Xuan-Xue)

来源出版物: JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH 卷: 122 期: 1 页: 214-223 DOI: 10.1002/2016JB013508 出版年: JAN 2017

Web of Science 核心合集中的 "被引频次": 78

被引频次合计: 100

摘要: The surface uplift of mountain belts is in large part controlled by the effects of crustal thickening and mantle dynamic processes (e.g., lithospheric delamination or slab breakoff). Understanding the history and driving mechanism of uplift of the southern Tibetan Plateau requires accurate knowledge on crustal thickening over time. Here we determine spatial and temporal variations in crustal thickness using whole-rock La/Yb ratios of intermediate intrusive rocks from the Gangdese arc. Our results show that the crust was likely of normal thickness prior to approximately 70Ma (similar to 37km) but began to thicken locally at approximately 70-60Ma. The crust reached (58-50)10km at 55-45Ma extending over 400km along the strike of the arc. This thickening was likely due to magmatic underplating as a consequence of rollback and then breakoff of the subducting Neo-Tethyan slab. The crust attained a thickness of 6812km at approximately 20-10Ma, as a consequence of underthrusting of India and associated thrust faulting. The Gangdese Mountains in southern Tibet broadly attained an elevation of >4000m at approximately 55-45Ma as a result of isostatic surface uplift driven by crustal thickening and slab breakoff and reached their present-day elevation by 20-10Ma. Our paleoelevation estimates are consistent not only with the C-O isotope-based paleoaltimetry but also with the carbonate-clumped isotope paleothermometer, exemplifying the promise of reconstructing paleoelevation in time and space for ancient orogens through a combination of magmatic composition and Airy isostatic compensation.

入藏号: WOS:000395658900012

出版商: AMER GEOPHYSICAL UNION

出版商地址: 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Web of Science 类别: Geochemistry & Geophysics

ISSN: 2169-9313

eISSN: 2169-9356

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 224 条，共 381 条

标题: Deep carbon cycles constrained by a large-scale mantle Mg isotope anomaly in eastern China

作者: Li, SG (Li, Shu-Guang); Yang, W (Yang, Wei); Ke, S (Ke, Shan); Meng, X (Meng, Xunan); Tian, H (Tian, Hengci); Xu, LJ (Xu, Lijuan); He, YS (He, Yongsheng); Huang, J (Huang, Jian); Wang, XC (Wang, Xuan-Ce); Xia, Q (Xia, Qunke); Sun, WD (Sun, Weidong); Yang, XY (Yang, Xiaoyong); Ren, ZY (Ren, Zhong-Yuan); Wei, HQ (Wei, Haiquan); Liu, YS (Liu, Yongsheng); Meng, FC (Meng, Fancong); Yan, J (Yan, Jun)

来源出版物: NATIONAL SCIENCE REVIEW 卷: 4 期: 1 页: 111-120 DOI: 10.1093/nsr/nww070 出版年: JAN 2017

Web of Science 核心合集中的 "被引频次": 81

被引频次合计: 100

摘要: Although deep carbon recycling plays an important role in the atmospheric CO2 budget and climate changes through geological time, the precise mechanisms remain poorly understood. Since recycled sedimentary carbonate through plate subduction is the main light-delta Mg-26 reservoir within deep-Earth, Mg isotope variation in mantle-derived melts provides a novel perspective when investigating deep carbon cycling. Here, we show that the Late Cretaceous and Cenozoic continental basalts from 13 regions covering the whole of eastern China have low delta Mg-26 isotopic compositions, while the Early Cretaceous basalts from the same area and the island arc basalts from circum-Pacific subduction zones have mantle-like or heavy Mg isotopic characteristics. Thus, a large-scalemantle low delta Mg-26 anomaly in eastern China has been delineated, suggesting the contribution of sedimentary carbonates recycled into the upper mantle, but limited into the lower mantle. This large-scale spatial and temporal variation ofMg isotopes in the mantle places severe constraints on deep carbon recycling via oceanic subduction.

入藏号: WOS:000397767600017

出版商: OXFORD UNIV PRESS

出版商地址: GREAT CLARENDON ST, OXFORD OX2 6DP, ENGLAND

Web of Science 类别: Multidisciplinary Sciences

ISSN: 2095-5138

eISSN: 2053-714X

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 225 条，共 381 条

标题: Cost Efficient Resource Management in Fog Computing Supported Medical Cyber-Physical System

作者: Gu, L (Gu, Lin); Zeng, DZ (Zeng, Deze); Guo, S (Guo, Song); Barnawi, A (Barnawi, Ahmed); Xiang, Y (Xiang, Yong)

来源出版物: IEEE TRANSACTIONS ON EMERGING TOPICS IN COMPUTING 卷: 5 期: 1 页: 108-119 DOI: 10.1109/TETC.2015.2508382 出版年: JAN-MAR 2017

Web of Science 核心合集中的 "被引频次": 141

被引频次合计: 144

摘要: With the recent development in information and communication technology, more and more smart devices penetrate into people's daily life to promote the life quality. As a growing healthcare trend, medical cyber-physical systems (MCPSs) enable seamless and intelligent interaction between the computational elements and the medical devices. To support MCPSs, cloud resources are usually explored to process the sensing data from medical devices. However, the high quality-of-service of MCPS challenges the unstable and long-delay links between cloud data center and medical devices. To combat this issue, mobile edge cloud computing, or fog computing, which pushes the computation resources onto the network edge (e.g., cellular base stations), emerges as a promising solution. We are thus motivated to integrate fog computation and MCPS to build fog computing supported MCPS (FC-MCPS). In particular, we jointly investigate base station association, task distribution, and virtual machine placement toward cost-efficient FC-MCPS. We first formulate the problem into a mixed-integer non-linear linear program and then linearize it into a mixed integer linear programming (LP). To address the computation complexity, we further propose an LP-based two-phase heuristic algorithm. Extensive experiment results validate the high-cost efficiency of our algorithm by the fact that it produces near optimal solution and significantly outperforms a greedy algorithm.

入藏号: WOS:000396364000012

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Computer Science, Information Systems; Telecommunications

ISSN: 2168-6750

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 226 条，共 381 条

标题: In situ assembly of BiOI@Bi12O17Cl2 p-n junction: charge induced unique front-lateral surfaces coupling heterostructure with high exposure of BiOI {001} active facets for robust and nonselective photocatalysis

作者: Huang, HW (Huang, Hongwei); Xiao, K (Xiao, Ke); He, Y (He, Ying); Zhang, TR (Zhang, Tierui); Dong, F (Dong, Fan); Du, X (Du, Xin); Zhang, YH (Zhang, Yihe)

来源出版物: APPLIED CATALYSIS B-ENVIRONMENTAL 卷: 199 页: 75-86 DOI: 10.1016/j.apcatb.2016.06.020 出版年: DEC 15 2016

Web of Science 核心合集中的 "被引频次": 407

被引频次合计: 407

摘要: Synthesis of reactive exposing facets and p-n junction are of great importance for semiconductor photo catalysis. Herein, we develop a p-n junction BiOI@Bi12O17Cl2 heterostructure via facilely in situ depositing BiOI nanosheets on the surface of Bi12O17Cl2 plates. Owing to the charge inducement, the BiOI nanosheets are all vertically assembled onto the Bi12O17Cl2 large plates to form a unique front-lateral surfaces coupling heterostructure, which enables high exposure of {001} reactive exposing facets of BiOI. The photocatalytic properties are systematically evaluated by degrading multiform industrial contaminants and antibiotic, like 2,4-dichlorophenol (2,4-DCP), rhodamine B (RhB), phenol, bisphenol A (BPA), and tetracycline hydrochloride. It reveals that the BiOI@Bi12O17Cl2 heterostructure not only shows dramatically strengthened photocatalytic activity, but also unfold powerful and nonselective photooxidation ability under visible-light illumination. The photoelectrochemical characterizations demonstrated that the drastically promoted separation and transfer of charge carriers that derived from the benefits of BiOI {001} active facets and BiOI@Bi12O17Cl2 p-n junction are in charge of the high photo-activity. Detailed radicals detection and quantification experiments further corroborate our conclusions. The study may give us some new hints on designing novel heterostructured photoelectronic materials with integrating p-n junction and active exposing facets. (C) 2016 Elsevier B.V. All rights reserved.

入藏号: WOS:000382343500008

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Engineering, Environmental; Engineering, Chemical

ISSN: 0926-3373

eISSN: 1873-3883

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 227 条，共 381 条

标题: Efficient activation of peroxymonosulfate by magnetic Mn-MGO for degradation of bisphenol A

作者: Du, JK (Du, Jiangkun); Bao, JG (Bao, Jianguo); Liu, Y (Liu, Ying); Ling, HB (Ling, Haibo); Zheng, H (Zheng, Han); Kim, SH (Kim, Sang Hoon); Dionysiou, DD (Dionysiou, Dionysios D.)

来源出版物: JOURNAL OF HAZARDOUS MATERIALS 卷: 320 页: 150-159 DOI: 10.1016/j.jhazmat.2016.08.021 出版年: DEC 15 2016

Web of Science 核心合集中的 "被引频次": 102

被引频次合计: 107

摘要: A heterogeneous manganese/magnetite/graphene oxide (Mn-MGO) hybrid catalyst was fabricated through the reduction of KMnO4 by ethylene glycol in the presence of magnetite/GO (MGO) particles. The Mn-MGO catalyst exhibited high efficacy and long-term stability in activating peroxymonosulfate (PMS) to generate sulfate radicals for the removal of bisphenol A (BPA) from water. The results of the batch experiments indicated that an increase in the catalyst dose and solution pH could enhance BPA degradation in the coupled Mn-MGO/PMS system. Regardless of the initial pH, the solution pH significantly dropped after the reaction, which was caused by catalytic PMS activation. The production of sulfate radicals and hydroxyl radicals was validated through radical quenching and electron paramagnetic resonances (EPR) tests. BPA degradation pathways were proposed on the basis of LC-MS and GC-MS analyses. Finally, a possible mechanism of catalytic PMS activation was proposed that involved electron transfer from MnO or Mn2O3 to PMS with the generation of sulfate radicals, protons and MnO2, as well as the simultaneous reduction of MnO2 by PMS. (C) 2016 Elsevier B.V. All rights reserved.

入藏号: WOS:000385600700017

PubMed ID: 27544727

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Engineering, Environmental; Environmental Sciences

ISSN: 0304-3894

eISSN: 1873-3336

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 228 条，共 381 条

标题: Joint Optimization of Task Scheduling and Image Placement in Fog Computing Supported Software-Defined Embedded System

作者: Zeng, DZ (Zeng, Deze); Gu, L (Gu, Lin); Guo, S (Guo, Song); Cheng, ZX (Cheng, Zixue); Yu, S (Yu, Shui)

来源出版物: IEEE TRANSACTIONS ON COMPUTERS 卷: 65 期: 12 页: 3702-3712 DOI: 10.1109/TC.2016.2536019 出版年: DEC 1 2016

Web of Science 核心合集中的 "被引频次": 161

被引频次合计: 161

摘要: Traditional standalone embedded system is limited in their functionality, flexibility, and scalability. Fog computing platform, characterized by pushing the cloud services to the network edge, is a promising solution to support and strengthen traditional embedded system. Resource management is always a critical issue to the system performance. In this paper, we consider a fog computing supported software-defined embedded system, where task images lay in the storage server while computations can be conducted on either embedded device or a computation server. It is significant to design an efficient task scheduling and resource management strategy with minimized task completion time for promoting the user experience. To this end, three issues are investigated in this paper: 1) how to balance the workload on a client device and computation servers, i.e., task scheduling, 2) how to place task images on storage servers, i.e., resource management, and 3) how to balance the I/O interrupt requests among the storage servers. They are jointly considered and formulated as a mixed-integer nonlinear programming problem. To deal with its high computation complexity, a computation-efficient solution is proposed based on our formulation and validated by extensive simulation based studies.

入藏号: WOS:000388498600015

出版商: IEEE COMPUTER SOC

出版商地址: 10662 LOS VAQUEROS CIRCLE, PO BOX 3014, LOS ALAMITOS, CA 90720-1314 USA

Web of Science 类别: Computer Science, Hardware & Architecture; Engineering, Electrical & Electronic

ISSN: 0018-9340

eISSN: 1557-9956

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 229 条，共 381 条

标题: Microplastic pollution of lakeshore sediments from remote lakes in Tibet plateau, China

作者: Zhang, K (Zhang, Kai); Su, J (Su, Jing); Xiong, X (Xiong, Xiong); Wu, X (Wu, Xiang); Wu, CX (Wu, Chenxi); Liu, JT (Liu, Jiantong)

来源出版物: ENVIRONMENTAL POLLUTION 卷: 219 页: 450-455 DOI: 10.1016/j.envpol.2016.05.048 出版年: DEC 2016

Web of Science 核心合集中的 "被引频次": 143

被引频次合计: 171

摘要: Tibetan Plateau is known as the world's third pole, which is characterized by a low population density with very limited human activities. Tibetan Plateau possesses the greatest numbers of high-altitude inland lakes in the world. However, no information is currently available on the characteristic of microplastic pollution in those lakes within this remote area. In this work, lakeshore sediments from four lakes within the Siling Co basin in northern Tibet were sampled and examined for microplastics (<5 mm). Microplastics were detected in six out of seven sampling sites with abundances ranging from 8 +/- 14 to 563 +/- 1219 items/m(2). Riverine input might have contributed to the high abundance of microplastics observed in this remote area. Morphological features suggest that microplastics are derived from the breakdown of daily used plastic products. Polyethylene, polypropylene, polystyrene, polyethylene terephthalate, and polyvinyl chloride were identified from the microplastic samples using laser Raman spectroscopy, and oxidative and mechanical weathering textures were observed on the surface of microplastics using scanning electron microscope. These results demonstrate the presence of micro plastics even for inland lakes in remote areas under very low human impact, and microplastic pollution can be a global issue. (C) 2016 Elsevier Ltd. All rights reserved.

入藏号: WOS:000390734100051

PubMed ID: 27238763

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Environmental Sciences

ISSN: 0269-7491

eISSN: 1873-6424

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 230 条，共 381 条

标题: Insights into the tectonic evolution of the North China Craton through comparative tectonic analysis: A record of outward growth of Precambrian continents

作者: Kusky, TM (Kusky, T. M.); Polat, A (Polat, A.); Windley, BF (Windley, B. F.); Burke, KC (Burke, K. C.); Dewey, JF (Dewey, J. F.); Kidd, WSF (Kidd, W. S. F.); Maruyama, S (Maruyama, S.); Wang, JP (Wang, J. P.); Deng, H (Deng, H.); Wang, ZS (Wang, Z. S.); Wang, C (Wang, C.); Fu, D (Fu, D.); Li, XW (Li, X. W.); Peng, HT (Peng, H. T.)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 162 页: 387-432 DOI: 10.1016/j.earscirev.2016.09.002 出版年: NOV 2016

Web of Science 核心合集中的 "被引频次": 133

被引频次合计: 141

摘要: Archean cratons have map patterns and rock associations that are diagnostic of the Wilson Cycle. The North China Craton (NCC) consists of several distinctly different tectonic units, but the delineation and understanding of the significance of individual sutures and the rocks between them has been controversial. We present an actualistic tectonic division and evolution of the North China Craton based on Wilson Cycle and comparative tectonic analysis that uses a multi-disciplinary approach in order to define sutures, their ages, and the nature of the rocks between them, to determine their mode of formation and means of accretion or exhumation, and propose appropriate modern analogues. The eastern unit of the craton consists of several different small blocks assembled between 2.6 and 2.7 Ga ago, that resemble fragments of accreted arcs from an assembled archipelago similar to those in the extant SW Pacific. A thick Atlantic-type passive margin developed on the western side of the newly assembled Eastern Block by 2.6-2.5 Ga. A > 1300 km-long arc and accretionary prism collided with the margin of the Eastern Block at 2.5 Ga, obducting ophiolites and ophiolitic melanges onto the block, and depositing a thick clastic wedge in a foreland basin farther into the Eastern Block. This was followed by an arc-polarity reversal, which led to a short-lived injection of mantle wedge-derived melts to the base of the crust that led to the intrusion of mafic dikes and arc-type granitoid (TTG) plutons with associated metamorphism. By 2.43 Ga, the remaining open ocean west of the accreted arc closed with the collision of an oceanic plateau now preserved as the Western Block with the collision-modified margin of the Eastern Block, causing further deformation in the Central Orogenic Belt. 2.4-235 Ga rifting of the newly amalgamated continental block formed a rift along its center, and new oceans within the other two rift arms, which removed a still-unknown continental fragment from its northern margin. By 2.3 Ga an arc collided with a new Atlantic-type margin developed over the rift sequence along the northern margin of the craton, and thus was converted to an Andean margin through arc-polarity reversal.

Andean margin tectonics affected much of the continental block from 2.3 to 1.9 Ga, giving rise to a broad E-W swath of continental margin magmas, and retro-arc sedimentary basins including a foreland basin superimposed on the passive northern margin. The horizontal extent of these tectonic components is similar to that across the present-day Andes in South America. From 1.88 to 1.79 Ga a granulite facies metamorphic event was superimposed across the entire continental block with high-pressure granulites and eclogites in the north, and medium-pressure granulites across the whole craton to the south. The scale and duration of this post-collisional event is similar to that in Central Asia that resulted from the Cenozoic India-Asia collision. The deep crustal granulites and volcanic rocks on the surface today, interpreted to be anatectic melts from deep crustal granulites, are similar to high-grade metamorphic rocks and partial melts presently forming at mid-crustal levels beneath Tibet. Structural fabrics in lower-crustal migmatites related to this event reveal that they flowed laterally parallel to the collision boundary, in a way comparable to what is speculated to be happening in the deep crust of the Himalayan/Tribetan foreland. We relate this continent-continent collision to the collision of the North China Craton with the postulated Columbia (Nuna) Continent. The NCC broke out of the Columbia Continent between 17531673 Ma, as shown by the formation of a suite of anorthosite, mangerite, charnocicite, and alkali-feldspar granites in an ENE-striking belt along the northern margin of the craton, whose intrusion was followed by the development of rifts and graben, mafic dike swarms, and eventually an Atlantic-type passive margin that signaled the beginning of a long period of tectonic quiescence and carbonate deposition for the NCC during Sinian times, which persisted into the Paleozoic. The style of tectonic accretion in the NCC changed at circa 2.5 Ga, from an earlier phase of accretion of arcs that are presently preserved in horizontal lengths of several hundred kilometers, to the accretion and preservation of linear arcs several thousand kilometers long with associated oceanic plateaus, microcontinents, and accretionary prisms. The style of progressively younger and westward outward accretion of different tectonic components is reminiscent of the style of accretion in the Superior Craton, and may signal the formation of progressively larger landmasses at the end of the Archean (perhaps like the Kenorland Continent), then into the Paleoproterozoic, culminating in the assembly of the Columbia (Nuna) Continent at 1.9-1.8 Ga. (C) 2016 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY license.

入藏号: WOS:000388776700018

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 231 条，共 381 条

标题: A comparative evaluation of coal specific surface area by CO2 and N-2 adsorption and its influence on CH4 adsorption capacity at different pore sizes

作者: Zhao, JL (Zhao, Junlong); Xu, H (Xu, Hao); Tang, DZ (Tang, Dazhen); Mathews, JP (Mathews, Jonathan P.); Li, S (Li, Song); Tao, S (Tao, Shu)

来源出版物: FUEL 卷: 183 页: 420-431 DOI: 10.1016/j.fuel.2016.06.076 出版年: NOV 1 2016

Web of Science 核心合集中的 "被引频次": 96

被引频次合计: 97

摘要: Coal has a heterogenous porosity that influences its specific surface area (SSA) and CH4 adsorption and desorption. However, the pore size distribution obtained with N-2 adsorption is only reliable at pore sizes >2 nm omitting the important contribution of micropore (<2 nm). Here, 13 coal samples from three series were measured by both the N-2 at 77 K and CO2 at 273 K, respectively, to compared the adsorption pore structure characteristics of different coal ranks, seams, and macrolithotypes, which further revealed the influences of mesopore (2-50 nm) and micropore on CH4 adsorption capacity at different pore sizes. The larger micropore total pore volume (TPV) contributes to the larger micropore SSA. As micropores are common and contribute extensively to most of the SSA (>99%) in these coals, a much better relationship exists between the Dubinin-Radushkevich (DR) SSA and CH4 adsorption capacity (Langmuir volume). With the increase of the coal rank, the CH4 adsorption capacity increases continuously and the DR SSA shows a tendency of first decreasing then increasing; at the same coal rank, from the bright to dull coal, the vitrinite content as well as the DR SSA and CH4 adsorption capacity decreases; for the three main coal seams in the Hancheng mine area, the No. 11 coal has the largest DR SSA and CH4 adsorption capacity followed by the No. 3 coal and No. 5 coal. With CO2 adsorption, it is more significant than N-2 adsorption to accurately characterize the microscopic structure of coal and understand the gas adsorption mechanism. (C) 2016 Elsevier Ltd. All rights reserved.

入藏号: WOS:000381619400047

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0016-2361

eISSN: 1873-7153

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 232 条，共 381 条

标题: Beyond the Sparsity-Based Target Detector: A Hybrid Sparsity and Statistics-Based Detector for Hyperspectral Images

作者: Du, B (Du, Bo); Zhang, YX (Zhang, Yuxiang); Zhang, LP (Zhang, Liangpei); Tao, DC (Tao, Dacheng)

来源出版物: IEEE TRANSACTIONS ON IMAGE PROCESSING 卷: 25 期: 11 页: 5345-5357 DOI: 10.1109/TIP.2016.2601268 出版年: NOV 2016

Web of Science 核心合集中的 "被引频次": 109

被引频次合计: 109

摘要: Hyperspectral images provide great potential for target detection, however, new challenges are also introduced for hyperspectral target detection, resulting that hyperspectral target detection should be treated as a new problem and modeled differently. Many classical detectors are proposed based on the linear mixing model and the sparsity model. However, the former type of model cannot deal well with spectral variability in limited endmembers, and the latter type of model usually treats the target detection as a simple classification problem and pays less attention to the low target probability. In this case, can we find an efficient way to utilize both the high-dimension features behind hyperspectral images and the limited target information to extract small targets? This paper proposes a novel sparsity-based detector named the hybrid sparsity and statistics detector (HSSD) for target detection in hyperspectral imagery, which can effectively deal with the above two problems. The proposed algorithm designs a hypothesis-specific dictionary based on the prior hypotheses for the test pixel, which can avoid the imbalanced number of training samples for a class-specific dictionary. Then, a purification process is employed for the background training samples in order to construct an effective competition between the two hypotheses. Next, a sparse representation-based binary hypothesis model merged with additive Gaussian noise is proposed to represent the image. Finally, a generalized likelihood ratio test is performed to obtain a more robust detection decision than the reconstruction residual-based detection methods. Extensive experimental results with three hyperspectral data sets confirm that the proposed HSSD algorithm clearly outperforms the state-of-the-art target detectors.

入藏号: WOS:000385380500002

PubMed ID: 27552753

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Computer Science, Artificial Intelligence; Engineering, Electrical & Electronic

ISSN: 1057-7149

eISSN: 1941-0042

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 233 条，共 381 条

标题: Fractal characterization of pore-fracture in low-rank coals using a low-field NMR relaxation method

作者: Zhou, SD (Zhou, Sandong); Liu, DM (Liu, Dameng); Cai, YD (Cai, Yidong); Yao, YB (Yao, Yanbin)

来源出版物: FUEL 卷: 181 页: 218-226 DOI: 10.1016/j.fuel.2016.04.119 出版年: OCT 1 2016

Web of Science 核心合集中的 "被引频次": 93

被引频次合计: 101

摘要: To describe a low-field nuclear magnetic resonance (NMR) method for quantifying pore-fracture fractal dimensions and their influence on effective porosity and permeability, we performed modeling comparisons between fractal analysis and pore-fracture physical properties in low-rank coals. The adsorption space fractal (D-NMRA), seepage space fractal (D-NMRS) and moveable fluid space fractal (D-NMRM) were calculated to be 1.62-1.91, 2.77-2.98 and 1.56-2.75, respectively. The D-NMRA generally increased with increasing Langmuir volume (V-L, 9.54-31.06 m(3)/t), Langmuir pressure (P-L, 0.58-8.13 MPa), the Brunauer-Emmett-Teller (BET) surface area and its fractal dimension. Higher D-NMRA indicated the significant coalbed methane (CBM) adsorption capability. Both the D-NMRS and D-NMRM decreased with increasing areas of T-2 > 2.5 ms distribution (S-T and S-CT) and sorting coefficient. These phenomena showed that the NMR fractal method could reflect the coal pore-fracture heterogeneity and had significant influence on seepage space content. The correlations of moveable fluid porosity and permeability with D-NMRM can be found by performing the models of y = ax + b (a < 0), so coals with high D-NMRM occur to have low flow capability. Furthermore, the pore-fracture porosity and permeability have positive correlations with ST and SCT, which result from the connection between pores and fractures. These results also show that fractal analysis calculated with T-2 can be developed to appraise the physical properties of low-rank coals and supply some reference for a relatively full identification of porous media. We advise that low-field NMR can be employed as a lossless analytic method to quantify moveable fluid space fractal theory. (C) 2016 Elsevier Ltd. All rights reserved.

入藏号: WOS:000377328700019

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0016-2361

eISSN: 1873-7153

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 234 条，共 381 条

标题: Extracellular electron transfer mechanisms between microorganisms and minerals

作者: Shi, L (Shi, Liang); Dong, HL (Dong, Hailiang); Reguera, G (Reguera, Gemma); Beyenal, H (Beyenal, Haluk); Lu, AH (Lu, Anhuai); Liu, J (Liu, Juan); Yu, HQ (Yu, Han-Qing); Fredrickson, JK (Fredrickson, James K.)

来源出版物: NATURE REVIEWS MICROBIOLOGY 卷: 14 期: 10 页: 651-662 DOI: 10.1038/nrmicro.2016.93 出版年: OCT 2016

Web of Science 核心合集中的 "被引频次": 436

被引频次合计: 466

摘要: Electrons can be transferred from microorganisms to multivalent metal ions that are associated with minerals and vice versa. As the microbial cell envelope is neither physically permeable to minerals nor electrically conductive, microorganisms have evolved strategies to exchange electrons with extracellular minerals. In this Review, we discuss the molecular mechanisms that underlie the ability of microorganisms to exchange electrons, such as c-type cytochromes and microbial nanowires, with extracellular minerals and with microorganisms of the same or different species. Microorganisms that have extracellular electron transfer capability can be used for biotechnological applications, including bioremediation, biomining and the production of biofuels and nanomaterials.

入藏号: WOS:000383806400010

PubMed ID: 27573579

出版商: NATURE PUBLISHING GROUP

出版商地址: MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

Web of Science 类别: Microbiology

ISSN: 1740-1526

eISSN: 1740-1534

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 235 条，共 381 条

标题: Oceanic oxygenation events in the anoxic Ediacaran ocean

作者: Sahoo, SK (Sahoo, S. K.); Planavsky, NJ (Planavsky, N. J.); Jiang, G (Jiang, G.); Kendall, B (Kendall, B.); Owens, JD (Owens, J. D.); Wang, X (Wang, X.); Shi, X (Shi, X.); Anbar, AD (Anbar, A. D.); Lyons, TW (Lyons, T. W.)

来源出版物: GEOBIOLOGY 卷: 14 期: 5 页: 457-468 DOI: 10.1111/gbi.12182 出版年: SEP 2016

Web of Science 核心合集中的 "被引频次": 119

被引频次合计: 124

摘要: The ocean-atmosphere system is typically envisioned to have gone through a unidirectional oxygenation with significant oxygen increases in the earliest (ca. 635Ma), middle (ca. 580Ma), or late (ca. 560Ma) Ediacaran Period. However, temporally discontinuous geochemical data and the patchy metazoan fossil record have been inadequate to chart the details of Ediacaran ocean oxygenation, raising fundamental debates about the timing of ocean oxygenation, its purported unidirectional rise, and its causal relationship, if any, with the evolution of early animal life. To better understand the Ediacaran ocean redox evolution, we have conducted a multi-proxy paleoredox study of a relatively continuous, deep-water section in South China that was paleogeographically connected with the open ocean. Iron speciation and pyrite morphology indicate locally euxinic (anoxic and sulfidic) environments throughout the Ediacaran in this section. In the same rocks, redox sensitive element enrichments and sulfur isotope data provide evidence for multiple oceanic oxygenation events (OOEs) in a predominantly anoxic global Ediacaran-early Cambrian ocean. This dynamic redox landscape contrasts with a recent view of a redox-static Ediacaran ocean without significant change in oxygen content. The duration of the Ediacaran OOEs may be comparable to those of the oceanic anoxic events (OAEs) in otherwise well-oxygenated Phanerozoic oceans. Anoxic events caused mass extinctions followed by fast recovery in biologically diversified Phanerozoic oceans. In contrast, oxygenation events in otherwise ecologically monotonous anoxic Ediacaran-early Cambrian oceans may have stimulated biotic innovations followed by prolonged evolutionary stasis.

入藏号: WOS:000383806500003

PubMed ID: 27027776

出版商: WILEY-BLACKWELL

出版商地址: 111 RIVER ST, HOBOKEN 07030-5774, NJ USA

Web of Science 类别: Biology; Environmental Sciences; Geosciences, Multidisciplinary

ISSN: 1472-4677

eISSN: 1472-4669

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 236 条，共 381 条

标题: Big Data Meet Green Challenges: Big Data Toward Green Applications

作者: Wu, JS (Wu, Jinsong); Guo, S (Guo, Song); Li, J (Li, Jie); Zeng, DZ (Zeng, Deze)

来源出版物: IEEE SYSTEMS JOURNAL 卷: 10 期: 3 页: 888-900 DOI: 10.1109/JSYST.2016.2550530 出版年: SEP 2016

Web of Science 核心合集中的 "被引频次": 129

被引频次合计: 129

摘要: Big data are widely recognized as being one of the most powerful drivers to promote productivity, improve efficiency, and support innovation. It is highly expected to explore the power of big data and turn big data into big values. To answer the interesting question whether there are inherent correlations between the two tendencies of big data and green challenges, a recent study has investigated the issues on greening the whole life cycle of big data systems. This paper would like to discover the relations between the trend of big data era and that of the new generation green revolution through a comprehensive and panoramic literature survey in big data technologies toward various green objectives and a discussion on relevant challenges and future directions.

入藏号: WOS:000383260300003

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Computer Science, Information Systems; Engineering, Electrical & Electronic; Operations Research & Management Science; Telecommunications

ISSN: 1932-8184

eISSN: 1937-9234

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 237 条，共 381 条

标题: Gold mineralization in China: Metallogenic provinces, deposit types and tectonic framework

作者: Deng, J (Deng, Jun); Wang, QF (Wang, Qingfei)

来源出版物: GONDWANA RESEARCH 卷: 36 页: 219-274 DOI: 10.1016/j.gr.2015.10.003 出版年: AUG 2016

Web of Science 核心合集中的 "被引频次": 300

被引频次合计: 343

摘要: We present a review of major gold mineralization events in China and a summary of metallogenic provinces, deposit types, metallogenic epochs and tectonic settings. Over 200 investigated gold deposits are grouped into 16 Au-metallogenic provinces within five tectonic units such as the Central Asian orogenic belt comprising provinces of Northeast China and Tianshan-Altay; North China Craton comprising the northern margin, Jiaodong, and Xiaoqinling; the Qinling-Qilian-Kunlun orogenic belt consisting of the West Qingling, North Qilian, and East Kunlun; the Tibet and Sanjiang orogenic belts consisting of Lhasa, Garze-Litang, Ailaoshan, and Daduhe-Jinpingshan; and the South China block comprising Youjiang basin, Jiangnan orogenic belt, Middle and Lower Yangtze River, and SE coast. The gold deposits are classified as orogenic, Jiaodong-, porphyry-skarn, Carlin-like, and epithermal-types, among which the first three types are dominant.

The orogenic gold deposits formed in various tectonic settings related to oceanic subduction and subsequent crustal extension in the Qinling-Qilian-Kunlun, Tianshan-Altay, northern margin of North China Craton, and Xiaoqinling, and related to the Eocene-Miocene continental collision in the Tibet and Sanjiang orogenic belts. The tectonic periods such as from slab subduction to block amalgamation, from continental soft to hard collision, from intracontinental compression to shearing or extension, are important for the formation of the orogenic gold deposits. The orogenic gold deposits are the products of metamorphic fluids released during regional metamorphism associated with oceanic subduction or continental collision, or related to magma emplacement and associated hydrothermal activity during lithospheric extension after ocean closure. The Jiaodong-type, clustered around Jiaodong, Xiaoqinling, and the northern margin of the North China Craton, is characterized by the involvement of mantle-derived fluids and a temporal link to the remote subduction of the Pacific oceanic plate concomitant with the episodic destruction of North China Craton. The Carlin-like gold metallogenesis is related to the activity of connate fluid, metamorphic fluid, and meteoric water in different degrees in the Youjiang basin and West Qinling; the former Au province is temporally related to the remote subduction of the Tethyan oceanic plate and the later formed in a syn-collision setting. Porphyry-skarn Au deposits are distributed in the Tianshan-Altay, the Middle and Lower Yangtze River region, and Tibet and Sanjiang orogenic belts in both subduction and continental collision settings. The magma for the porphyry-skarn Au deposits commonly formed by melting of a thickened juvenile crust The epithermal Au deposits, dominated by the low-sulfidation type, plus a few high-sulfidation ones, were produced during the Carboniferous oceaic plate subduction in Tianshan-Altay, during Early Cretaceous and Quaternary oceanic plate subduction in SEt coast of South China Block, and during the Pliocene continental collision in Tibet. The available data of different isotopic systems, especially fluid D-O isotopes and carbonate C-O systems, reveal that the isotopic compositions are largely overlapping for different genetic types and different for the same genetic type in different Au belts. The isotopic compositions are thus not good indicators of various genetic types of gold deposit, perhaps due to overprinting of post-ore alteration or the complex evolution of the fluids.

Although gold metallogeny in China was initiated in Cambrian and lasted until Cenozoic, it is mainly concentrated in four main periods. The first is Carboniferous when the Central Asian orogenic belt formed by welding of micro continental blocks and arcs in Tianshan-Altay, generating a series of porphyry-epithermal-orogenic deposits. The second period is from Triassic to Early Jurassic when the current tectonic mainframe of China started to take shape. In central and southern China, the North China Craton, South China Block and Simao block were amalgamated after the closure of Paleo-Tethys Ocean in Triassic, forming orogenic and Carlin-like gold deposits. The third period is Early Cretaceous when the subduction of the Pacific oceanic plate to the east and that of Neo-Tethyan oceanic plate to the west were taking place. The subduction in eastern China produced the Jiaodong-type deposits in the North China Craton, the skarn-type deposits in the northern margin (Middle to lower reaches of Yangtze River) and the epithermal-type deposits in the southeastern margin in the South China Block. The subduction in western China produced the Carlin-like gold deposits in the Youjiang basin and orogenic ones in the Garze-Litang orogenic belt. The Cenozoic is the last major phase, during which southwestern China experienced continental collision, generating orogenic and porphyry-skarn gold deposits in the Tibetan and Sanjiang orogenic belts. Due to the spatial overlap of the second and third periods in a single gold province, the Xiaoqinling, West Qinling, and northern margin of the North China Craton have two or more episodes of gold metallogeny. (C) 2015 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000384702900014

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 238 条，共 381 条

标题: Solar radiation prediction using different techniques: model evaluation and comparison

作者: Wang, LC (Wang, Lunche); Kisi, O (Kisi, Ozgur); Zounemat-Kermani, M (Zounemat-Kermani, Mohammad); Salazar, GA (Ariel Salazar, German); Zhu, ZM (Zhu, Zhongmin); Gong, W (Gong, Wei)

来源出版物: RENEWABLE & SUSTAINABLE ENERGY REVIEWS 卷: 61 页: 384-397 DOI: 10.1016/j.rser.2016.04.024 出版年: AUG 2016

Web of Science 核心合集中的 "被引频次": 104

被引频次合计: 109

摘要: Daily observations of meteorological parameters, air temperature, air pressure, relative humidity, water vapor pressure and sunshine duration hours observed at 12 stations in different climatic zones during 1961-2014 are reported for testing, validating and comparing different solar radiation models. Three types of Artificial Neural Network (ANN)methods, Multilayer Perceptron (MLP), Generalized Regression Neural Network (GRNN) and Radial Basis Neural Network (RBNN) are applied in this study for predicting the daily global solar radiation (Hg) using above meteorological variables as model inputs. The Bristow Campbell model has also been improved by considering the factors influencing the incoming solar radiation, such as relative humidity, cloud cover, etc. The results indicate that there are large differences in model accuracies for each model at different stations, the ANN models can estimate daily Hg with satisfactory accuracy at most stations in different climate zones, and MLP and RBNN models provide better accuracy than the GRNN and IBC models, for example, the MAE and RMSE values range 1.53-2.29 and 1.94-3.27 MJ m(-2) day(-1), respectively for MLP model. The model performances also show some differences at different stations for each model, for example, the RMSE values from MLP model are 1.94 and 3.27 MJ m(-2) day(-1) at NN and HZ stations, respectively. Meanwhile, ANN models underestimate few high radiation values at some stations, which may due to the differences in training and testing data ranges and distributions of the stations. Finally, the differences in model performances from different solar radiation models have been further analyzed. (C) 2016 Elsevier Ltd. All rights reserved.

入藏号: WOS:000378671800029

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Green & Sustainable Science & Technology; Energy & Fuels

ISSN: 1364-0321

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 239 条，共 381 条

标题: Organolead Halide Perovskite Nanocrystals: Branched Capping Ligands Control Crystal Size and Stability

作者: Luo, BB (Luo, Binbin); Pu, YC (Pu, Ying-Chih); Lindley, SA (Lindley, Sarah A.); Yang, Y (Yang, Yi); Lu, LQ (Lu, Liqiang); Li, Y (Li, Yat); Li, XM (Li, Xueming); Zhang, JZ (Zhang, Jin Z.)

来源出版物: ANGEWANDTE CHEMIE-INTERNATIONAL EDITION 卷: 55 期: 31 页: 8864-8868 DOI: 10.1002/anie.201602236 出版年: JUL 25 2016

Web of Science 核心合集中的 "被引频次": 161

被引频次合计: 164

摘要: CH3NH3PbBr3 perovskite nanocrystals (PNCs) of different sizes (ca. 2.5-100 nm) with high photoluminescence (PL) quantum yield (QY; ca. 15-55%) and product yield have been synthesized using the branched molecules, APTES and NH2-POSS, as capping ligands. These ligands are sterically hindered, resulting in a uniform size of PNCs. The different capping effects resulting from branched versus straight-chain capping ligands were compared and a possible mechanism proposed to explain the dissolution-precipitation process, which affects the growth and aggregation of PNCs, and thereby their overall stability. Unlike conventional PNCs capped with straight-chain ligands, APTES-capped PNCs show high stability in protic solvents as a result of the strong steric hindrance and propensity for hydrolysis of APTES, which prevent such molecules from reaching and reacting with the core of PNCs.

入藏号: WOS:000383253700009

PubMed ID: 27294890

出版商: WILEY-V C H VERLAG GMBH

出版商地址: POSTFACH 101161, 69451 WEINHEIM, GERMANY

Web of Science 类别: Chemistry, Multidisciplinary

ISSN: 1433-7851

eISSN: 1521-3773

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 240 条，共 381 条

标题: Thermal conductivity enhancement of polyethylene glycol/expanded vermiculite shape-stabilized composite phase change materials with silver nanowire for thermal energy storage

作者: Deng, Y (Deng, Yong); Li, JH (Li, Jinhong); Qian, TT (Qian, Tingting); Guan, WM (Guan, Weimin); Li, YL (Li, Yali); Yin, XP (Yin, Xiaoping)

来源出版物: CHEMICAL ENGINEERING JOURNAL 卷: 295 页: 427-435 DOI: 10.1016/j.cej.2016.03.068 出版年: JUL 1 2016

Web of Science 核心合集中的 "被引频次": 144

被引频次合计: 158

摘要: A series of novel polyethylene glycol-silver nanowire/expanded vermiculite shape-stabilized composite phase change materials (PEG-Ag/EVM ss-CPCMs) were prepared by physical blending and impregnation method to overcome liquid leakage during phase transition and enhance the thermal conductivity of PEG. In these PEG-Ag/EVM ss-CPCMs, PEG served as the phase change material for thermal energy storage; Ag NW served as thermal conductivity enhancement filler; EVM acted as the supporting material to provide structural strength and prevent the leakage of melted PEG. SEM analysis results indicated that Ag NW wrapped with PEG was well dispersed and enwrapped inside the pores and surfaces of EVM due to capillary force and surface tension. It was found that the maximum encapsulation capacity of PEG in all PEG-Ag/EVM ss-CPCMs with good shape stability was 66.1 wt.%. The thermal conductivity of PEG-Ag/EVM ss-CPCMs could be greatly enhanced by the prepared Ag NW with a length of 5-20 mu m and a diameter of 50-100 nm. A theoretical calculation method was developed to predict and evaluate the thermal conductivity enhancement ability of Ag NW. The predictions were consistent with experimental results. The thermal conductivity of PEG-Ag/EVM ss-CPCM19.3 reached 0.68 W/m K, which was 11.3 times higher than that of pure PEG, and corresponding phase change latent heat was 96.4 J/g. The supercooling extent of PEG in PEG-Ag/EVM ss-CPCMs decreased approximate 7 degrees C because the EVM could act as a heterogeneous nucleation center to promote the crystallization of PEG. FT-IR and TGA results showed that the PEG-Ag/EVM ss-CPCMs exhibited excellent chemical compatibility and thermal stability. (C) 2016 Elsevier B.V. All rights reserved.

入藏号: WOS:000375507300046

出版商: ELSEVIER SCIENCE SA

出版商地址: PO BOX 564, 1001 LAUSANNE, SWITZERLAND

Web of Science 类别: Engineering, Environmental; Engineering, Chemical

ISSN: 1385-8947

eISSN: 1873-3212

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 241 条，共 381 条

标题: The Challenges and Solutions for Cadmium-contaminated Rice in China: A Critical Review

作者: Hu, YN (Hu, Yuanan); Cheng, HF (Cheng, Hefa); Tao, S (Tao, Shu)

来源出版物: ENVIRONMENT INTERNATIONAL 卷: 92-93 页: 515-532 DOI: 10.1016/j.envint.2016.04.042 出版年: JUL-AUG 2016

Web of Science 核心合集中的 "被引频次": 207

被引频次合计: 234

摘要: The wide occurrence of Cd-contaminated rice in southern China poses significant public health risk and deserves immediate action, which arises primarily from extensive metal (including Cd) contamination of paddies with the fast expansion of nonferrous metal mining and smelting activities. Accumulation of Cd in rice grains can be reduced by removing Cd from the contaminated paddy soils, reducing its bioavailability, and controlling its uptake by rice plants. Although a range of measures can be taken to rehabilitate Cd-contaminated lands, including soil replacement and turnover, chemical washing, and phytoremediation, they are either too expensive and/or too slow. Various amendment materials, including lime, animal manures, and biochar, can be used to immobilize Cd in soils, but such fixation approach can only temporarily reduce Cd availability to rice uptake. Cultivation of alternative crops with low Cd accumulation in edible plant parts is impractical on large scales due to extensive contamination and food security concerns in southern China. Transgenic techniques can help develop rice cultivars with low Cd accumulation in grains, but little public acceptance is expected for such products. As an alternative, selection and development of low-Cd rice varieties and hybrids through plant biotechnology and breeding, particularly, by integration of marker-assisted selection (MAS) with traditional breeding, could be a practical and acceptable option that would allow continued rice production in soils with high bioavailability of Cd. Plant biotechnology and breeding can also help develop Cd-hyperaccumulating rice varieties, which can greatly facilitate phytoremediation of contaminated paddies. To eliminate the long-term risk of Cd entering the food chain, soils contaminated by Cd should be cleaned up when cost-effective remediation measures are available. (C) 2016 Elsevier Ltd. All rights reserved.

入藏号: WOS:000378951700055

PubMed ID: 27179698

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Environmental Sciences

ISSN: 0160-4120

eISSN: 1873-6750

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 242 条，共 381 条

标题: Stability Analysis for Delayed Neural Networks Considering Both Conservativeness and Complexity

作者: Zhang, CK (Zhang, Chuan-Ke); He, Y (He, Yong); Jiang, L (Jiang, Lin); Wu, M (Wu, Min)

来源出版物: IEEE TRANSACTIONS ON NEURAL NETWORKS AND LEARNING SYSTEMS 卷: 27 期: 7 页: 1486-1501 DOI: 10.1109/TNNLS.2015.2449898 出版年: JUL 2016

Web of Science 核心合集中的 "被引频次": 131

被引频次合计: 131

摘要: This paper investigates delay-dependent stability for continuous neural networks with a time-varying delay. This paper aims at deriving a new stability criterion, considering tradeoff between conservativeness and calculation complexity. A new Lyapunov-Krasovskii functional with simple augmented terms and delay-dependent terms is constructed, and its derivative is estimated by several techniques, including free-weighting matrix and inequality estimation methods. Then, the influence of the techniques used on the conservativeness and the complexity is analyzed one by one. Moreover, useful guidelines for improving criterion and future work are briefly discussed. Finally, the advantages of the proposed criterion compared with the existing ones are verified based on three numerical examples.

入藏号: WOS:000379752400007

PubMed ID: 26208366

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Computer Science, Artificial Intelligence; Computer Science, Hardware & Architecture; Computer Science, Theory & Methods; Engineering, Electrical & Electronic

ISSN: 2162-237X

eISSN: 2162-2388

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 243 条，共 381 条

标题: Deep feature weighting for naive Bayes and its application to text classification

作者: Jiang, LX (Jiang, Liangxiao); Li, CQ (Li, Chaoqun); Wang, SS (Wang, Shasha); Zhang, LG (Zhang, Lungan)

来源出版物: ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE 卷: 52 页: 26-39 DOI: 10.1016/j.engappai.2016.02.002 出版年: JUN 2016

Web of Science 核心合集中的 "被引频次": 127

被引频次合计: 129

摘要: Naive Bayes (NB) continues to be one of the top 10 data mining algorithms due to its simplicity, efficiency and efficacy. Of numerous proposals to improve the accuracy of naive Bayes by weakening its feature independence assumption, the feature weighting approach has received less attention from researchers. Moreover, to our knowledge, all of the existing feature weighting approaches only incorporate the learned feature weights into the classification of formula of naive Bayes and do not incorporate the learned feature weights into its conditional probability estimates at all. In this paper, we propose a simple, efficient, and effective feature weighting approach, called deep feature weighting (DFW), which estimates the conditional probabilities of naive Bayes by deeply computing feature weighted frequencies from training data. Empirical studies on a collection of 36 benchmark datasets from the UCI repository show that naive Bayes with deep feature weighting rarely degrades the quality of the model compared to standard naive Bayes and, in many cases, improves it dramatically. Besides, we apply the proposed deep feature weighting to some state-of-the-art naive Bayes text classifiers and have achieved remarkable improvements. (C) 2016 Elsevier Ltd. All rights reserved.

入藏号: WOS:000379631100003

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Automation & Control Systems; Computer Science, Artificial Intelligence; Engineering, Multidisciplinary; Engineering, Electrical & Electronic

ISSN: 0952-1976

eISSN: 1873-6769

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 244 条，共 381 条

标题: Stability analysis of systems with time-varying delay via relaxed integral inequalities

作者: Zhang, CK (Zhang, Chuan-Ke); He, Y (He, Yong); Jiang, L (Jiang, L.); Wu, M (Wu, Min); Zeng, HB (Zeng, Hong-Bing)

来源出版物: SYSTEMS & CONTROL LETTERS 卷: 92 页: 52-61 DOI: 10.1016/j.sysconle.2016.03.002 出版年: JUN 2016

Web of Science 核心合集中的 "被引频次": 183

被引频次合计: 185

摘要: This paper investigates the stability of linear systems with a time-varying delay. The key problem concerned is how to effectively estimate single integral term with time-varying delay information appearing in the derivative of Lyapunov-Krasovskii functional. Two novel integral inequalities are developed in this paper for this estimation task. Compared with the frequently used inequalities based on the combination of Wirtinger-based inequality (or Auxiliary function-based inequality) and reciprocally convex lemma, the proposed ones can provide smaller bounding gap without requiring any extra slack matrix. Four stability criteria are established by applying those inequalities. Based on three numerical examples, the advantages of the proposed inequalities are illustrated through the comparison of maximal admissible delay bounds provided by different criteria. (C) 2016 Elsevier B.V. All rights reserved.

入藏号: WOS:000377317000009

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Automation & Control Systems; Operations Research & Management Science

ISSN: 0167-6911

eISSN: 1872-7956

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 245 条，共 381 条

标题: Rapid oxygenation of Earth's atmosphere 2.33 billion years ago

作者: Luo, GM (Luo, Genming); Ono, SH (Ono, Shuhei); Beukes, NJ (Beukes, Nicolas J.); Wang, DT (Wang, David T.); Xie, SC (Xie, Shucheng); Summons, RE (Summons, Roger E.)

来源出版物: SCIENCE ADVANCES 卷: 2 期: 5 文献号: e1600134 DOI: 10.1126/sciadv.1600134 出版年: MAY 2016

Web of Science 核心合集中的 "被引频次": 127

被引频次合计: 128

摘要: Molecular oxygen (O-2) is, and has been, a primary driver of biological evolution and shapes the contemporary landscape of Earth's biogeochemical cycles. Although "whiffs" of oxygen have been documented in the Archean atmosphere, substantial O-2 did not accumulate irreversibly until the Early Paleoproterozoic, during what has been termed the Great Oxygenation Event (GOE). The timing of the GOE and the rate at which this oxygenation took place have been poorly constrained until now. We report the transition (that is, from being mass-independent to becoming mass-dependent) in multiple sulfur isotope signals of diagenetic pyrite in a continuous sedimentary sequence in three coeval drill cores in the Transvaal Supergroup, South Africa. These data precisely constrain the GOE to 2.33 billion years ago. The new data suggest that the oxygenation occurred rapidly-within 1 to 10 million years-and was followed by a slower rise in the ocean sulfate inventory. Our data indicate that a climate perturbation predated the GOE, whereas the relationships among GOE, "Snowball Earth" glaciation, and biogeochemical cycling will require further stratigraphic correlation supported with precise chronologies and paleolatitude reconstructions.

入藏号: WOS:000380073000030

PubMed ID: 27386544

出版商: AMER ASSOC ADVANCEMENT SCIENCE

出版商地址: 1200 NEW YORK AVE, NW, WASHINGTON, DC 20005 USA

Web of Science 类别: Multidisciplinary Sciences

ISSN: 2375-2548

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 246 条，共 381 条

标题: Terrane boundary and spatio-temporal distribution of ore deposits in the Sanjiang Tethyan Orogen: Insights from zircon Hf-isotopic mapping

作者: Wang, CM (Wang, Changming); Sagas, L (Sagas, Leon); Lu, YJ (Lu, Yongjun); Santosh, M (Santosh, M.); Du, B (Du, Bin); McCuaig, TC (McCuaig, T. Campbell)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 156 页: 39-65 DOI: 10.1016/j.earscirev.2016.02.008 出版年: MAY 2016

Web of Science 核心合集中的 "被引频次": 102

被引频次合计: 116

摘要: The Sanjiang Tethyan Orogen (SJTO) of the eastern Tethyan tectonic belt in China records a transition from Late Paleozoic Tethys realm to Cenozoic continental collision associated with the formation of large metallic mineral deposits. This contribution combines geological and Hf-isotopic data for igneous rocks from the SJTO, together with the salient features associated with mineralization to gain insights into the crustal architecture and metallogeny. Integrating the available information from tectonic events, sedimentary successions, paleobiogeography, and paleolatitude based on paleomagnetic data, the Hf isotopic maps that we construct highlight the Changning-Menglian Suture as an important tectonic boundary between the Gondwana and Cathaysian continents. The Changning-Menglian Suture separates two distinct Hf isotopic domains with an old, reworked, crustal block to the southwestern part of the SJTO, and a juvenile crustal block with significant mantle-derived components to the northeastern part of the orogen.

The Hf isotopic mapping of the SJTO also provides important indications on the location of different deposits. The Jinshajiang-Ailaoshan Suture appears to have exerted a first-order control on the localisation of Cenozoic magmatism and intrusion-related mineral systems. The magmatic source for intrusions in the eastern high-epsilon Hf, low MN? domain, is dominated by mantle components and gave rise to porphyry and porphyry-skarn Cu-(Mo) mineralization. In contrast, the magma sources for intrusions in the low-epsilon Hf, high T-DM(c) domains contain an old and reworked crustal component and gave rise to granite-related Sn-W mineralization. Those for the intrusions characterized by variable epsilon Hf and T-DM(c) are dominantly reworked older crustal components together with subordinate juvenile material which generated the granite-related Pb-Zn-Cu-Ag mineralization. (C) 2016 Elsevier B.V. All rights reserved.

入藏号: WOS:000375516500003

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 247 条，共 381 条

标题: The giant Jiaodong gold province: The key to a unified model for orogenic gold deposits?

作者: Groves, DI (Groves, David I.); Santosh, M (Santosh, M.)

来源出版物: GEOSCIENCE FRONTIERS 卷: 7 期: 3 特刊: SI 页: 409-417 DOI: 10.1016/j.gsf.2015.08.002 出版年: MAY 2016

Web of Science 核心合集中的 "被引频次": 105

被引频次合计: 113

摘要: Although the term orogenic gold deposit has been widely accepted for all gold-only lode-gold deposits, with the exception of Carlin-type deposits and rare intrusion-related gold systems, there has been continuing debate on their genesis. Early syngenetic models and hydrothermal models dominated by meteoric fluids are now clearly unacceptable. Magmatic-hydrothermal models fail to explain the genesis of orogenic gold deposits because of the lack of consistent spatially - associated granitic intrusions and inconsistent temporal relationships. The most plausible, and widely accepted, models involve metamorphic fluids, but the source of these fluids is hotly debated. Sources within deeper segments of the supracrustal successions hosting the deposits, the underlying continental crust, and subducted oceanic lithosphere and its overlying sediment wedge all have their proponents. The orogenic gold deposits of the giant Jiaodong gold province of China, in the delaminated North China Craton, contain ca. 120 Ma gold deposits in Precambrian crust that was metamorphosed over 2000 million years prior to gold mineralization. The only realistic source of fluid and gold is a subducted oceanic slab with its overlying sulfide-rich sedimentary package, or the associated mantle wedge. This could be viewed as an exception to a general metamorphic model where orogenic gold has been derived during greenschist- to amphibolite-facies metamorphism of supracrustal rocks: basaltic rocks in the Precambrian and sedimentary rocks in the Phanerozoic. Alternatively, if a holistic view is taken, Jiaodong can be considered the key orogenic gold province for a unified model in which gold is derived from late-orogenic metamorphic devolatilization of stalled subduction slabs and oceanic sediments throughout Earth history. The latter model satisfies all geological, geochronological, isotopic and geochemical constraints but the precise mechanisms of auriferous fluid release, like many other subduction-related processes, are model-driven and remain uncertain. (C) 2015, China University of Geosciences (Beijing) and Peking University. Production and hosting by Elsevier B.V.

入藏号: WOS:000375071600008

出版商: CHINA UNIV GEOSCIENCES, BEIJING

出版商地址: 29 XUEYUAN RD, HAIDIAN DISTRICT, 100083, PEOPLES R CHINA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1674-9871

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 248 条，共 381 条

标题: Fractal/multifractal modeling of geochemical data: A review

作者: Zuo, RG (Zuo, Renguang); Wang, J (Wang, Jian)

来源出版物: JOURNAL OF GEOCHEMICAL EXPLORATION 卷: 164 特刊: SI 页: 33-41 DOI: 10.1016/j.gexplo.2015.04.010 出版年: MAY 2016

Web of Science 核心合集中的 "被引频次": 127

被引频次合计: 128

摘要: Over the past several decades, a wide range of complex structures or phenomena of interest to geologists and geochemists has been quantitatively characterized using fractal/multifractal theory and models. With respect to the application of fractal/multifractal models to geochemical data, the focus has been on how to decompose geochemical populations or quantify the spatial distribution of geochemical data. A variety of fractal/multifractal models for this purpose have been proposed on the basis of the scaling characteristics of geochemical data. These include the concentration-area (C-A) fractal model, concentration-distance (C-D) fractal model, spectrum-area (S-A) multifractal model, multifractal singularity analysis, and the concentration-volume (C-V) fractal model. These fractal models have been widely demonstrated to be useful, as indicated by the increasing number of published papers. In this study, fractal/multifractal modeling of geochemical data including its theory, the way it works, its benefits and limitations, its applications, and the relationships between these models are reviewed. The comparison among of C-A, S-A, and multifractal singularity analysis based on simulated data suggested that mapping singularity technique can enhance and identify weak anomalies caused by buried sources. Future study should focus on how to distinguish the true anomalies associated to mineralization with the false anomalies from a fractal/multifractal perspective. (C) 2015 Elsevier B.V. All rights reserved.

入藏号: WOS:000373549200005

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0375-6742

eISSN: 1879-1689

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 249 条，共 381 条

标题: Microblock amalgamation in the North China Craton: Evidence from Neoarchaean magmatic suite in the western margin of the Jiaoliao Block

作者: Yang, QY (Yang, Qiong-Yan); Santosh, M (Santosh, M.); Collins, AS (Collins, Alan S.); Teng, XM (Teng, Xue-Ming)

来源出版物: GONDWANA RESEARCH 卷: 31 页: 96-123 DOI: 10.1016/j.gr.2015.04.002 出版年: MAR 2016

Web of Science 核心合集中的 "被引频次": 106

被引频次合计: 107

摘要: The Archaean Earth is considered to have been characterized by microcontinents that formed, dominantly, through the accretion of oceanic arcs and plateaus. The North China Craton (NCC) provides a typical case where at least seven ancient microcontinental nuclei with distinct lithological features and independent tectonic histories were amalgamated into the cratonic framework at the end of the Archaean. Here we investigate a suite of magmatic rocks developed at the periphery of one of these microblocks, the Jiaoliao Block that forms part of the composite Eastern Block of the NCC. We present petrological, geochemical and zircon U-Pb geochronological data from the Taipingzhai charnockite suite, and associated amphibolites, metagabbros and orthogneisses from the Qianxi Complex. Geochemically the rocks show a wide range of SiO2 (charnockite suite: 52.57-75.50 wt.%; metagabbro: 43.71 wt.%; amphibolite: 50.24 wt.%; garnet-bearing biotite: 63.73 wt.%), and MgO (charnockite suite: 0.89-5.01 wt.%; metagabbro: 3.99 wt.%; amphibolite: 6.23 wt.%; garnet-bearing biotite: 2.08 wt.%). The composition of the felsic units straddle from diorite through syeno-diorite to granite with both alkalic and subalkalic affinity, with dominantly magnesian composition and arc-related features. Their immobile trace element relationships suggest calc-alkaline affinity. They show positive Pb, Ba, La, Nd, and Gd and negative Nb, Ta, Sr, Th and Ti anomalies with slightly negative anomalies of Ce and Y, attesting to arc-related features. In tectonic classification diagrams, the rocks plot in the VAG + syn-COLG field or the VAG area suggesting subduction-related origin.

The dominant population of zircons in all these rocks displays magmatic crystallization features including high Th/U values with core-rims textures indicating subsequent thermal events. The zircon U-Pb data yield upper intercept ages of 2587 +/- 10 Ma to 2543 +/- 17 Ma and Pb-207/Pb-206 mean ages of 2578 +/- 7.3 Ma to 2536 +/- 8 Ma for the charnockite suite, marking the timing of emplacement of the arc magmas. The overgrowth rims as well as discrete neoformed grains are interpreted as dating subsequent metamorphism and yield Pb-207/Pb-206 ages between 2533 Ma to 2490 Ma. Zircons in the metagabbro preserve upper intercept ages of 2556 +/- 20 Ma representing the crystallization age of this rock The younger ages of 2449 +/- 58 Ma (upper intercept age) and 1845 +/- 25 Ma (Pb-207/Pb-206 spot age) are interpreted to represent subsequent multiple thermal events in this area. Zircons in the amphibolite preserve the Pb-207/Pb-206 mean age of 2539 +/- 9 Ma, representing the crystallization age of this rock. The garnet-bearing biotite gneiss shows an upper intercept age of 2562 +/- 10 Ma (MSWD = 0.66; N = 36) and the Pb-207/Pb-206 mean age of 2561 +/- 9 Ma (MSWD = 0.63; N = 33) which is taken to represent the crystallization age of this rock. Some inherited zircons are also identified with Pb-207/Pb-206 ages of 2664 +/- 26 Ma and 2628 +/- 26 Ma. Zircon Lu-Hf data show dominantly positive sHf(t) values and combined with crustal residence ages, the results suggest Mesoarchean to Neoarchean juvenile crust formation in the NCC. We interpret the data presented here to represent a phase of major late Neoarchaean arc magmatism along the western margin of the Jiaoliao Block related to the birth of microcontinental nuclei within the NCC. Our data suggest that the Western and Eastern Blocks might not have existed as discrete crustal blocks, and that the construction of the NCC is a result of the assembly of several microblocks or terranes at the end of Archaean. Similar Archean cratonic nuclei in other regions of the world might have formed part of a primitive supercontinent in the early Earth. (C) 2015 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000371555100005

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 250 条，共 381 条

标题: Early Mesozoic southward subduction history of the Mongol-Okhotsk oceanic plate: Evidence from geochronology and geochemistry of Early Mesozoic intrusive rocks in the Erguna Massif, NE China

作者: Tang, J (Tang, Jie); Xu, WL (Xu, Wen-Liang); Wang, F (Wang, Feng); Zhao, S (Zhao, Shuo); Wang, W (Wang, Wei)

来源出版物: GONDWANA RESEARCH 卷: 31 页: 218-240 DOI: 10.1016/j.gr.2014.12.010 出版年: MAR 2016

Web of Science 核心合集中的 "被引频次": 116

被引频次合计: 135

摘要: In this paper we present new zircon U-Pb ages, Hf isotope data, and whole-rock major and trace element data for Early Mesozoic intrusive rocks in the Erguna Massif of NE China, and we use these data to constrain the history of southward subduction of the Mongol-Okhotsk oceanic plate, and its influence on NE China as a whole. The zircon U-Pb dating indicates that Early Mesozoic magmatic activity in the Erguna Massif can be subdivided into four stages at similar to 246 Ma, similar to 225 Ma, similar to 205 Ma, and similar to 185 Ma. The similar to 246 Ma intrusive rocks comprise a suite of high-K calc-alkaline diorites, quartz diorites, granodiorites, monzogranites, and syenogranites, with I-type affinities. The similar to 225 Ma intrusive rocks consist of gabbro-diorites and granitoids, and they constitute a bimodal igneous association. The similar to 205 Ma intrusive rocks are dominated by calc-alkaline I-type granitoids that are accompanied by subordinate intermediate-mafic rocks. The similar to 185 Ma intrusive rocks are dominated by I-type granitoids, accompanied by minor amounts of A-types. These Early Mesozoic granitoids mainly originated by partial melting of a depleted and heterogeneous lower crust, whereas the coeval mafic rocks were probably derived from partial melting of a depleted mantle modified by subduction-related fluids. The rock associations and their geochemical features indicate that the similar to 246 Ma, similar to 205 Ma, and similar to 185 Ma intrusive rocks formed in an active continental margin setting related to the southward subduction of the Mongol-Okhotsk oceanic plate. The similar to 225 Ma bimodal igneous rock association formed within an extensional environment in a pause during the subduction process of the Mongol -Okhotsk oceanic plate. Every magmatic stage has its own corresponding set of porphyry deposits in the southeast of the Mongol-Okhotsk suture belt Taking all this into account, we conclude the following: (1) during the Early Mesozoic, the Mongol-Okhotsk oceanic plate was subducted towards the south beneath the Erguna Massif, but with a pause in subduction at similar to 225 Ma; and (2) the southward subduction of the Mongol-Okhotsk oceanic plate not only caused the intense magmatic activity, but was also favorable to the formation of porphyry deposits. (C) 2015 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000371555100012

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 251 条，共 381 条

标题: Pore structure characteristics of lower Silurian shales in the southern Sichuan Basin, China: Insights to pore development and gas storage mechanism

作者: Yang, F (Yang, Feng); Ning, ZF (Ning, Zhengfu); Wang, Q (Wang, Qing); Zhang, R (Zhang, Rui); Krooss, BM (Krooss, Bernhard M.)

来源出版物: INTERNATIONAL JOURNAL OF COAL GEOLOGY 卷: 156 页: 12-24 DOI: 10.1016/j.coal.2015.12.015 出版年: FEB 15 2016

Web of Science 核心合集中的 "被引频次": 95

被引频次合计: 107

摘要: Silurian shale in Sichuan Basin is currently the most important target zone for shale gas exploration and development in China. Pore structure characteristics of Lower Silurian Longmaxi shales from southern Sichuan Basin were investigated. The combination of field emission scanning electron microscope (FE-SEM) and argon ion beam milling was utilized to describe the nanometer-to micrometer-scale (>1.2 nm) pore systems. The shales were characterized by organic geochemical and mineralogical analyses. Total porosity, pore size distribution (PSD), specific surface area, and gas content were determined. Controls of organic matter richness, thermal maturity, and mineralogy on porosity were examined. The contribution of individual mineral components to total porosity was analyzed quantitatively. Total gas contents of the shales determined from canister desorption data were compared with theoretical (sorptive and volumetric) gas storage capacities.

The total organic carbon (TOC) content of the shale samples ranges between 0.1 and 8.0 wt.% and helium porosity varies between 0.7 and 5.7%. Maturity in terms of equivalent vitrinite reflectance of bitumen (R-eqv) ranges from 1.8 to 3.2%. TOC content is a strong control for the pore system of these shales, and shows a positive correlation with porosity. Porosity increases with increasing thermal maturity when R-eqv is less than 2.5%, but decreases for higher thermal maturity samples. FE-SEM reveals four pore types related to the rock matrix that are classified as follows: organic matter (OM)-hosted pores, pores in clay minerals, pores of framework minerals, and intragranular pores in microfossils. Pores in clay minerals are always associated with the framework of clay flakes, and develop around rigid mineral grains because the pressure shadows of mineral grains prevent pores from collapsing. Pores of framework minerals are probably related to dissolution by acidic fluids, and the dissolution-related pores promote porosity of shales. A unimodal PSD exists in the micropore range of TOC-rich samples, while the PSD of carbonate-rich samples are bimodal. A PSD maximum in the micropore range is attributed by OM and another maximum in the range of mesopore-macropores is probably caused by the dissolution of carbonate minerals. Quantitative evaluation of the contribution of individual mineral components to porosity shows that the organic matter contributes approximately 62% to the total porosity. Framework minerals (quartz, feldspar, and carbonates, et al.) and clay minerals contribute 25% and 13%, respectively. The total gas content of these shales ranges from 0.4 to 62 m(3)/t, and the total gas contents of selected samples determined from canister desorption tests agree with the theoretically estimated original gas-in-place (OGIP). OM-hosted pores are the main space for gas storage, and accounted for about 78% (55% adsorbed gas plus 23% free gas) of the OGIP, while pores in the inorganic matter accommodate 22% free gas of the OGIP. (C) 2016 Elsevier B.V. All rights reserved.

入藏号: WOS:000372764100002

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Energy & Fuels; Geosciences, Multidisciplinary

ISSN: 0166-5162

eISSN: 1872-7840

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 252 条，共 381 条

标题: Assembly of the Lhasa and Qiangtang terranes in central Tibet by divergent double subduction

作者: Zhu, DC (Zhu, Di-Cheng); Li, SM (Li, Shi-Min); Cawood, PA (Cawood, Peter A.); Wang, Q (Wang, Qing); Zhao, ZD (Zhao, Zhi-Dan); Liu, SA (Liu, Sheng-Ao); Wang, LQ (Wang, Li-Quan)

来源出版物: LITHOS 卷: 245 特刊: SI 页: 7-17 DOI: 10.1016/j.lithos.2015.06.023 出版年: FEB 15 2016

Web of Science 核心合集中的 "被引频次": 230

被引频次合计: 294

摘要: Integration of lithostratigraphic, magmatic, and metamorphic data from the Lhasa-Qiangtang collision zone in central Tibet (including the Bangong suture zone and adjacent regions of the Lhasa and Qiangtang terranes) indicates assembly through divergent double sided subduction. This collision zone is characterized by the absence of Early Cretaceous high-grade metamorphic rocks and the presence of extensive magmatism with enhanced mantle contributions at ca. 120-110 Ma. Two Jurassic-Cretaceous magmatic arcs are identified from the Caima-Duobuza-Rongma-Kangqiong-Amdo magmatic belt in the western Qiangtang Terrane and from the Along Tso-Yanhu-Daguo-Baingoin-Daru Tso magmatic belt in the northern Lhasa Terrane. These two magmatic arcs reflect northward and southward subduction of the Bangong Ocean lithosphere, respectively. Available multidisciplinary data reconcile that the Bangong Ocean may have closed during the Late Jurassic-Early Cretaceous (most likely ca. 140-130 Ma) through arc-arc "soft" collision rather than continent-continent "hard" collision. Subduction zone retreat associated with convergence beneath the Lhasa Terrane may have driven its rifting and separation from the northern margin of Gondwana leading to its accretion within Asia. (C) 2015 Elsevier B.V. All rights reserved.

入藏号: WOS:000371945200002

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geochemistry & Geophysics; Mineralogy

ISSN: 0024-4937

eISSN: 1872-6143

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 253 条，共 381 条

标题: Investigation of pore structure and fractal characteristics of organic-rich shale reservoirs: A case study of Lower Cambrian Qiongzhusi formation in Malong block of eastern Yunnan Province, South China

作者: Li, A (Li, Ang); Ding, WL (Ding, Wenlong); He, JH (He, Jianhua); Dai, P (Dai, Peng); Yin, S (Yin, Shuai); Xie, F (Xie, Fei)

来源出版物: MARINE AND PETROLEUM GEOLOGY 卷: 70 页: 46-57 DOI: 10.1016/j.marpetgeo.2015.11.004 出版年: FEB 2016

Web of Science 核心合集中的 "被引频次": 132

被引频次合计: 145

摘要: In order to study pore structure and fractal characteristics of the organic-rich marine shale, fourteen shale samples from Lower Cambrian Qjongzhusi formation in Malong block of eastern Yunnan province were investigated by organic geochemical analysis (total organic carbon content analysis and thermal maturity analysis), X-ray diffraction (XRD) analysis, porosity and permeability tests, field emission scanning electron microscopy (FE-SEM), low-pressure nitrogen adsorption and methane adsorption experiments. Fractal dimensions D-1 and D-2 (at relative pressure of 0-0.5 and 0.5-1, respectively) were obtained from the nitrogen adsorption data using the fractal Frenkel-Halsey-Hill (FHH) method. Not only have the relationships among pore structure parameters of shale, the relationships between TOC content, mineral compositions, pore structure parameters and fractal dimensions been discussed, but also the significance of two fractal dimensions D-1 and D-2 and the impact of fractal dimensions on adsorption capacity have been investigated. The results showed that fourteen shale samples have TOC content ranging from 1.25% to 7.72%, two fractal dimensions both increase with the increasing TOC content, and gradually come to a standstill the curves present the shape of "parabola". The major mineralogical compositions of shales are quartz and clay minerals, the quartz contents are between 25.5% and 42.7%, the clay contents are between 26.6% and 44.2%. Fractal dimension D-1 has a negative correlation with quartz contents and a positive correlation with clay minerals contents, but fractal dimension D2 has no apparent relationship with quartz and clay minerals contents. The specific surface area is in the range of 4.98 m(2)/g-19.66 m(2)/g, the total pore volume is between 0.00479 cm(3)/g and 0.01765 cm(3)/g, and the average pore diameter is between 337 nm and 6.02 nm. Two fractal dimensions increase with the increasing surface area and pore volume, and also increase with the decreasing average pore diameter because of. the complicated pore surface and structure of small pores. Further investigation indicates that D-1 represents fractal characteristics from the irregular pore surface, while D-2 represents fractal characteristics related to the complicated pore structure, and shale samples with larger fractal dimensions have higher methane adsorption capacity. Therefore fractal analysis is helpful to have a better understanding of pore structure and adsorption capacity of marine shale. (C) 2015 Elsevier Ltd. All rights reserved.

入藏号: WOS:000368954600004

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0264-8172

eISSN: 1873-4073

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 254 条，共 381 条

标题: Adsorption kinetics of magnetic biochar derived from peanut hull on removal of Cr (VI) from aqueous solution: Effects of production conditions and particle size

作者: Han, YT (Han, Yitong); Cao, X (Cao, Xi); Ouyang, X (Ouyang, Xin); Sohi, SP (Sohi, Saran P.); Chen, JW (Chen, Jiawei)

来源出版物: CHEMOSPHERE 卷: 145 页: 336-341 DOI: 10.1016/j.chemosphere.2015.11.050 出版年: FEB 2016

Web of Science 核心合集中的 "被引频次": 189

被引频次合计: 212

摘要: Magnetic biochar was made from peanut hull biomass using iron chloride in a simplified aqueous phase approach and pyrolysis at alternative peak temperatures (450-650 degrees C). Magnetic biochar showed an extreme capacity for adsorption of hexavalent chromium Cr (VI) from aqueous solution, which was 1-2 orders of magnitude higher compared to standard (non-magnetic) biochar from the same feedstock. Adsorption increased with pyrolysis temperature peaking at 77,542 mg kg(-1) in the sample pyrolysed at 650 degrees C. In contrast to magnetic biochar, the low adsorption capacity of standard biochar decreased with increasing pyrolysis temperature. The fine particle size of magnetic biochar and low aqueous pH were also important for adsorption. Surfaces of products from batch adsorption experiments were characterized by scanning electron microscopy, energy-dispersive X-ray analysis, X-ray diffraction, X-ray photoelectron spectroscopy and vibrating sample magnetometer. This revealed that gamma-Fe2O3 was crucial to the properties (adsorbance and magnetism) of magnetic biochar. The removal mechanism was the Cr (VI) electrostatic attracted on protonated -OH on gamma-Fe2O3 surface and it could be desorbed by alkaline solution. Findings suggest that pyrolysis has potential to create effective, magnetically recoverable adsorbents relevant to environmental application. (C) 2015 Elsevier Ltd. All rights reserved.

入藏号: WOS:000369196300043

PubMed ID: 26692510

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Environmental Sciences

ISSN: 0045-6535

eISSN: 1879-1298

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 255 条，共 381 条

标题: Nano-scale pore structure and fractal dimension of organic-rich Wufeng-Longmaxi shale from Jiaoshiba area, Sichuan Basin: Investigations using FE-SEM, gas adsorption and helium pycnometry

作者: Yang, R (Yang, Rui); He, S (He, Sheng); Yi, JZ (Yi, Jizheng); Hu, QH (Hu, Qinhong)

来源出版物: MARINE AND PETROLEUM GEOLOGY 卷: 70 页: 27-45 DOI: 10.1016/j.marpetgeo.2015.11.019 出版年: FEB 2016

Web of Science 核心合集中的 "被引频次": 230

被引频次合计: 256

摘要: Much attention have been recently paid to the upper Ordovician Wufeng shale (O(3)w) and lower Silurian Longmaxi shale (S(1)l) in the Jiaoshiba area of Sichuan Basin, which is now the largest producing shale gas field in China. Field emission scanning electron microscopy (FE-SEM), low pressure gas (N-2 and CO2) adsorption, helium pycnometry, X-ray diffraction and geochemical analyses were performed to investigate the pore structure and fractal dimension of the pores in O(3)w-S(1)l shale formation in the Jiaoshiba area. FE-SEM images show that organic matter (OM) pores are dominant in the organic-rich samples and these pores are often irregular, bubble-like, elliptical and faveolate in shape, while in organic-poor samples, limited and isolated interparticle (interP), intraparticle (intraP) and OM pores are observed. Reversed S-shaped isotherms obtained from nitrogen adsorption are type II, and hysteresis loops:indicate that the shape of micropore in the samples is slit-or plate-like. BET surface areas and total pore volume vary from 12.2 to 27.1 m(2)/g and from 1.8 x 10(-2) to 2.9 x 10(-2) cm(3)/g, with an average of 19.5 m(2)/g and 2.3 x 10(-2) cm(3)/g, respectively. Adsorption volume from both N-2 and CO2 adsorption increases with respect to TOC contents. Porosities obtained from helium porosimetry are comparable with these from gas (CO2 and N-2) adsorption in O(3)w-S(1)l shale. However, porosity determined by quantitative FE-SEM analysis is much smaller, which is mainly related to limited resolution and the small areas of investigation.

Based on the Frenkel-Halsey-Hill (FHH) model of low-pressure N-2 adsorption, fractal dimensions of the pores varied from 2.737 to 2.823. Relationships between pore structure parameters and TOC content, mineral composition and fractal dimension reveal that the fractal dimension is mainly associated with micropores. Samples with higher TOC content, higher quartz content and lower clay content tend to contain more heterogeneous micropores, resulting in higher fractal dimensions and more complicated pore structure in shales. Therefore, fractal dimension is an effective parameter to reflect the complexity of pore structure and the degree of micropore development in O(3)w-S(1)l shale. (C) 2015 Elsevier Ltd. All rights reserved.

入藏号: WOS:000368954600003

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0264-8172

eISSN: 1873-4073

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 256 条，共 381 条

标题: Archean upper crust transition from mafic to felsic marks the onset of plate tectonics

作者: Tang, M (Tang, Ming); Chen, K (Chen, Kang); Rudnick, RL (Rudnick, Roberta L.)

来源出版物: SCIENCE 卷: 351 期: 6271 页: 372-375 DOI: 10.1126/science.aad5513 出版年: JAN 22 2016

Web of Science 核心合集中的 "被引频次": 173

被引频次合计: 179

摘要: The Archean Eon witnessed the production of early continental crust, the emergence of life, and fundamental changes to the atmosphere. The nature of the first continental crust, which was the interface between the surface and deep Earth, has been obscured by the weathering, erosion, and tectonism that followed its formation. We used Ni/Co and Cr/Zn ratios in Archean terrigenous sedimentary rocks and Archean igneous/metaigneous rocks to track the bulk MgO composition of the Archean upper continental crust. This crust evolved from a highly mafic bulk composition before 3.0 billion years ago to a felsic bulk composition by 2.5 billion years ago. This compositional change was attended by a fivefold increase in the mass of the upper continental crust due to addition of granitic rocks, suggesting the onset of global plate tectonics at similar to 3.0 billion years ago.

入藏号: WOS:000368440500037

PubMed ID: 26798012

出版商: AMER ASSOC ADVANCEMENT SCIENCE

出版商地址: 1200 NEW YORK AVE, NW, WASHINGTON, DC 20005 USA

Web of Science 类别: Multidisciplinary Sciences

ISSN: 0036-8075

eISSN: 1095-9203

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 257 条，共 381 条

标题: Nanoscale pore characteristics of the Lower Cambrian Niutitang Formation. Shale: A case study from Well Yuke #1 in the Southeast of Chongqing, China

作者: Sun, MD (Sun, Mengdi); Yu, BS (Yu, Bingsong); Hu, QH (Hu, Qinhong); Chen, S (Chen, Song); Xia, W (Xia, Wei); Ye, RC (Ye, Ruochen)

来源出版物: INTERNATIONAL JOURNAL OF COAL GEOLOGY 卷: 154 页: 16-29 DOI: 10.1016/j.coal.2015.11.015 出版年: JAN 15 2016

Web of Science 核心合集中的 "被引频次": 94

被引频次合计: 101

摘要: The Lower Cambrian Niutitang Formation Shale is one of the most important shales being studied for unconventional development in China. In this work, we focused on 21 core samples of Niutitang Shale from Well Yuke #1 in the southeast of Chongqing, to better understand their vertical reservoir characteristics and pore evolution. Using complementary approaches of X-ray diffraction, N-2 and CO2 adsorption, petrology microscope, and field emission-scanning electron microscopy, we conducted a series of analyses for pore volume, pore-size distribution, surface area, fractal characterization, organic geochemistry, petrology, and mineralogy. Results indicate that most micropores (<2 nm) are associated with grains of organic matter. Meanwhile, the meso-macropores (2-50 nm to >50 nm) are composed of organic pores and inorganic pores. Meso-macropore volume per unit of total organic carbon (TOC) content dramatically decreases with an increase of maturity and extent of diagenesis. Meanwhile, the TOC-normalized micropore volume also rapidly declines after maturity (R-0) values were higher than 3.13%. The surface fractal dimension D-1 for relative N-2 pressure P/P-0 > 0.5 with capillary condensation and surface fractal dimension D-2 for P/P-0 < 0.5 with mono- and multi-layer adsorption, derived from N-2 sorption isotherms, can be used to indicate the pore characteristics. D1 is controlled by the percentages of micropore volume. D-2 seems to be affected by the clay mineral contents and thermal maturity. (C) 2015 Elsevier B.V. All rights reserved.

入藏号: WOS:000371554300002

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Energy & Fuels; Geosciences, Multidisciplinary

ISSN: 0166-5162

eISSN: 1872-7840

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 258 条，共 381 条

标题: Relationships Between Gold and Pyrite at the Xincheng Gold Deposit, Jiaodong Peninsula, China: Implications for Gold Source and Deposition in a Brittle Epizonal Environment

作者: Yang, LQ (Yang, Li-Qiang); Deng, J (Deng, Jun); Wang, ZL (Wang, Zhong-Liang); Guo, LN (Guo, Lin-Nan); Li, RH (Li, Rui-Hong); Groves, DI (Groves, David I.); Danyushevsky, LV (Danyushevsky, Leonid V.); Zhang, C (Zhang, Chao); Zheng, XL (Zheng, Xiao-Li); Zhao, H (Zhao, Hai)

来源出版物: ECONOMIC GEOLOGY 卷: 111 期: 1 页: 105-126 DOI: 10.2113/econgeo.111.1.105 出版年: JAN-FEB 2016

Web of Science 核心合集中的 "被引频次": 118

被引频次合计: 132

摘要: The Xincheng gold deposit, hosted by the Early Cretaceous 132 to 123 Ma Guojialing-type granitoids in northwest Jiaodong Peninsula, southeast North China craton, formed about 2 billion years later than regional metamorphism of the Archean Jiaodong basement rocks. The Xincheng deposit comprises mineralized zones with three types of hydrothermal pyrite associated with gold, tellurides, and a variety of sulfides: py(1) as disseminated euhedral to subhedral grains in altered granitoids around quartz veins; py(2) as subhedral grains with brittle cataclastic textures and fractures in quartz-pyrite veins; and py(3) as subhedral, partially corroded crystals in sulfide-rich veins or veinlets. All three generations of pyrite are unzoned and have low trace element contents, including very low lattice-bound gold contents: (py(1): 0.180 ppm; py(2): 0.053 ppm; py(3): 0.060 ppm). Given that there is 10 to 15% pyrite in the ore zone at Xincheng, its very low gold content indicates that it contributes <0.2% of gold to the 7.75 g/t gold in the orebody. Instead, over 99% of the gold is present as discrete electrum and/or gold (total range 0.02-59% silver) grains, which are largely sited in fractures at all scales in pyrite, other ore minerals, and quartz. Importantly, visible gold in py(3) is also sited on solution-corroded pyrite grains. The pyrite textural and geochemical data indicate that it is impossible to derive the high gold-grade orebodies through local remobilization of originally lattice-hound gold in pyrite. Instead, the gold is interpreted to have been deposited through sulfidation reactions and phase separation of a H2O-CO2 ore fluid during progressive brittle cataclastic deformation associated with seismic activity and regional sinistral transtensional shear movement. This concomitant fluid infiltration and deformation caused episodic deposition and fracturing and corrosion of earlier formed pyrite and deposited visible gold in dilational cracks. The coupled development of the transtensional, rather than normal transpressional setting, and precipitation of gold within dilational veins and wall-rock alteration facilitated the deposition of visible gold and an exceptionally high gold tenor. All deposit characteristics indicate that the Xincheng gold deposit is a member of the epizonal orogenic deposit class.

入藏号: WOS:000375353600005

出版商: SOC ECONOMIC GEOLOGISTS, INC

出版商地址: 7811 SCHAFFER PARKWAY, LITTLETON, CO 80127 USA

Web of Science 类别: Geochemistry & Geophysics; Mineralogy

ISSN: 0361-0128

eISSN: 1554-0774

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 259 条，共 381 条

标题: Tectonic architecture and multiple orogeny of the Qinling Orogenic Belt, Central China

作者: Dong, YP (Dong, Yunpeng); Santosh, M (Santosh, M.)

来源出版物: GONDWANA RESEARCH 卷: 29 期: 1 页: 1-40 DOI: 10.1016/j.gr.2015.06.009 出版年: JAN 2016

Web of Science 核心合集中的 "被引频次": 338

被引频次合计: 407

摘要: The Qinling Orogenic Belt (QOB) is located between the North China and South China Blocks, and has been considered to have formed by the collision between these blocks. This contribution provides an overview of the composition, nature and ages of the principal tectonic elements including ophiolitic melanges and related volcanic rocks, gabbroic-granitic intrusions, metamorphic basement, sedimentary cover and its provenance in this orogen. The QOB represents a composite orogenic belt that witnessed four major episodes of accretion and collision between discrete continental blocks, such as the North China Block, North Qinling Block and the South China Block. The available geology, geochemistry and geochronology of these tectonic elements together with those of the adjacent regions, can be used to trace the polarity of the four stages of plate subduction, accretion, collision and the related tectonic history as follows. (1) The Grenvillian-aged orogeny along the Kuanping suture between the North Qinling Terrane and North China Block is associated with the southward subduction of Mesoproterozoic Ocean, which led to the amalgamation of the North Qinling Terrane and the North China Block at ca. 1.0 Ga. (2) The Neoproterozoic subduction/accretion as represented by the widely distributed terranes and volcanic-sedimentary rocks, resulted in a wide accretionary wedge formed by the southward accretion to the South China Block. (3) The Paleozoic orogeny along the Shangdan suture between the North and South Qinling Blocks is characterized by Early Paleozoic ocean-continent subduction and a long-lived Late Paleozoic continent-continent subduction. The polarity and detailed evolutionary process of the Early Paleozoic ocean-continent subduction have been constrained by the ophiolitic melange, island-arc related volcanics and intrusions in the North Qinling Belt, as well as the evolutionary history of the Erlangping back-arc basin. The northward subduction and destruction of the Shangdan Ocean during Early Devonian was succeeded by continent-continent subduction beneath the North Qinling Terrane from Middle Devonian to Early Triassic. (4) The Triassic collisional orogeny occurred between the South Qinling Block and South China Block along the Mianlue suture. Silurian rifting along the present Mianlue zone marks the precursor of the eastern Mianlue Ocean, which separated the South Qinling Block from the South China Block during Late Paleozoic. The northward subduction of the ocean led to the Middle Triassic collision between the South China Block and the South Qinling Block. (5) After the collision, the whole QOB evolved into an intra-continental orogen, including Early Jurassic differential tectonics, Late Jurassic to Early Cretaceous compression and thrusting, and Late Cretaceous to Paleogene orogen collapse and depression. These multiple orogenies resulted in abundant mineralization, the genetic types, spatial distribution and metallogenic epochs which correlate well with the tectonics and evolutionary history of the QOB. (C) 2015 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000367485100001

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 260 条，共 381 条

标题: Investigation of pore structure and fractal characteristics of the Lower Silurian Longmaxi shales in western Hunan and Hubei Provinces in China

作者: Hu, JG (Hu, Jingang); Tang, SH (Tang, Shuheng); Zhang, SH (Zhang, Songhang)

来源出版物: JOURNAL OF NATURAL GAS SCIENCE AND ENGINEERING 卷: 28 页: 522-535 DOI: 10.1016/j.jngse.2015.12.024 出版年: JAN 2016

Web of Science 核心合集中的 "被引频次": 96

被引频次合计: 101

摘要: The pore structure characteristics of the Lower Silurian Longmaxi Formation shales collected from western Hunan and Hubei were investigated using high-pressure mercury injection and low temperature N-2 adsorption/desorption experiments. Total organic carbon values, thermal maturity values and mineralogical compositions were also obtained by relevant experimental methods. The TOC value varies from 0.71% to 4.75%, with a mean value of 2.58%, and their thermal maturities have reached the over-mature stage and dry gas generation window. Quartz and clay minerals are the major mineral compositions in the samples. In contrast to previous studies of other shales (Chalmers and Bustin, 2008; Han et al., 2013; Wang et al., 2013), there are no carbonates in the shale samples of this area. Due to their biogenic source, quartz content is positively correlated with TOC values. Pore size distributions obtained from mercury injection experiments were divided into three groups. Samples with higher TOC content always have smaller dominant pore sizes, and the pore sizes of samples with higher clay mineral content and lower TOC values may be larger, with a major peak between 30 nm and 1 mu m. Through analyzing the N-2 adsorption and desorption isotherms, we found that the morphology of pores in the shales rich in organic matter is narrow neck and wide body, and that of those rich in clay minerals is flat-shaped. BJH and DFT models were used to derive pore size distributions using N-2 adsorption data, and both are representative. The differential distribution curves of pore volumes and surface areas show that all shale samples' dominant pore sizes are within the range of micropores and mesopores, and they are the major contributors to pore surface areas, while mesopores and macropores make more significant contributions to pore volumes. The specific surface area calculated by the BET method ranges from 6.12 to 28.42 m(2)/g, with an average value of 16.14 m(2)/g, and the total pore volume varies from 0.0105 to 0.0338 cm(3)/g, with a mean value of 0.0213 cm(3)/g. The correlational analysis between pore structure parameters and TOC value, quartz and clay mineral content indicates that organic matter and quartz are positively associated with the micropores and fine mesopores, though larger pores can also exist in organic matter, and clay minerals play an important role in mesopores and macropores generation. Due to the infeasibility of using mercury porosimetry data to obtain fractal dimensions, DQ calculated from N-2 adsorption data are used, its value ranges from 2.6353 to 2.7694, with an average value of 2.7284. As we know, the more micropores contained in the shale, the more complex the pore structure will be, and as a result, the fractal dimension will be larger. Therefore, organic matter and quartz positively influence fractal dimension, and there is a negative relationship between clay mineral content and fractal dimension. (C) 2015 Elsevier B.V. All rights reserved.

入藏号: WOS:000370457700046

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 1875-5100

eISSN: 2212-3865

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 261 条，共 381 条

标题: Decomposition analysis of energy-related carbon emissions from the transportation sector in Beijing

作者: Fan, FY (Fan, Fengyan); Lei, YL (Lei, Yalin)

来源出版物: TRANSPORTATION RESEARCH PART D-TRANSPORT AND ENVIRONMENT 卷: 42 页: 135-145 DOI: 10.1016/j.trd.2015.11.001 出版年: JAN 2016

Web of Science 核心合集中的 "被引频次": 62

被引频次合计: 66

摘要: In the process of rapid development and urbanization in Beijing, identifying the potential factors of carbon emissions in the transportation sector is an important prerequisite to controlling carbon emissions. Based on the expanded Kaya identity, we built a multivariate generalized Fisher index (GFI) decomposition model to measure the influence of the energy structure, energy intensity, output value of per unit traffic turnover, transportation intensity, economic growth and population size on carbon emissions from 1995 to 2012 in the transportation sector of Beijing. Compared to most methods used in previous studies, the GFI model possesses the advantage of eliminating decomposition residuals, which enables it to display better decomposition characteristics (Ang et al., 2004). The results show: (i) The primary positive drivers of carbon emissions in the transportation sector include the economic growth, energy intensity and population size. The cumulative contribution of economic growth to transportation carbon emissions reaches 334.5%. (ii) The negative drivers are the transportation intensity and energy structure, while the transportation intensity is the main factor that restrains transportation carbon emissions. The energy structure displays a certain inhibition effect, but its inhibition is not obvious. (iii) The contribution rate of the output value of per unit traffic turnover on transportation carbon emissions appears as a flat "M". To suppress the growth of carbon emissions in transportation further, the government of Beijing should take the measures of promoting the development of new energy vehicles, limiting private vehicles' increase and promoting public transportation, evacuating non-core functions of Beijing and continuingly controlling population size. (C) 2015 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licensesiby-nc-nd/4.0/).

入藏号: WOS:000369196000009

PubMed ID: 32362766

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Environmental Studies; Transportation; Transportation Science & Technology

ISSN: 1361-9209

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 262 条，共 381 条

标题: Influence of wastewater sludge treatment using combined peroxyacetic acid oxidation and inorganic coagulants re-flocculation on characteristics of extracellular polymeric substances (EPS)

作者: Zhang, WJ (Zhang, Weijun); Cao, BD (Cao, Bingdi); Wang, DS (Wang, Dongsheng); Ma, T (Ma, Teng); Xia, H (Xia, Hua); Yu, DH (Yu, Dehong)

来源出版物: WATER RESEARCH 卷: 88 页: 728-739 DOI: 10.1016/j.watres.2015.10.049 出版年: JAN 1 2016

Web of Science 核心合集中的 "被引频次": 118

被引频次合计: 135

摘要: Extracellular polymeric substances (EPS) are highly hydrated biopolymers and play important roles in bioflocculation, floc stability, and solid-water separation processes. Destroying EPS structure will result in sludge reduction and release of trapped water. In this study, the effects of combined process of peracetic acid (PAA) pre-oxidation and chemical re-flocculation on morphological properties and distribution and composition of EPS of the resultant sludge flocs were investigated in detail to gain insights into the mechanism involved in sludge treatment. It was found that sludge particles were effectively solubilized and protein-like substances were degraded into small molecules after PAA oxidation. A higher degradation of protein-like substances was observed at acid environments under PAA oxidation. Microscopic analysis revealed that no integral sludge floc was observed after oxidation with PAA at high doses. The floc was reconstructed with addition of inorganic coagulants (polyaluminium chloride (PACl) and ferric chloride (FeCl3)) and PACl performed better in flocculation due to its higher charge neutralization and bridging ability. Combined oxidative lysis and chemical re-flocculation provide a novel solution for sludge treatment. (C) 2015 Elsevier Ltd. All rights reserved.

入藏号: WOS:000367276500071

PubMed ID: 26584344

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Engineering, Environmental; Environmental Sciences; Water Resources

ISSN: 0043-1354

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 263 条，共 381 条

标题: A General and Facile Approach to Heterostructured Core/Shell BiVO4/BiOI p-n Junction: Room-Temperature in Situ Assembly and Highly Boosted Visible-Light Photocatalysis

作者: Huang, HW (Huang, Hongwei); He, Y (He, Ying); Du, X (Du, Xin); Chu, PK (Chu, Paul K.); Zhang, YH (Zhang, Yihe)

来源出版物: ACS SUSTAINABLE CHEMISTRY & ENGINEERING 卷: 3 期: 12 页: 3262-3273 DOI: 10.1021/acssuschemeng.5b01038 出版年: DEC 2015

Web of Science 核心合集中的 "被引频次": 210

被引频次合计: 213

摘要: Development of core/shell heterostructures and semiconductor p-n junctions is of great concern for environmental and energy applications. Herein, we develop a facile in situ deposition route for fabrication of a BiVO4/BiOI composite integrating both the core/shell heterostructure and semiconductor p-n junction at room temperature. In the BiVO4/BiOI core/shell heterostructure, the BiOI nanosheets are evenly assembled on the surface of the BiVO4 cores. The photocatalytic performance is evaluated by monitoring the degradation of the dye model Rhodamine B (RhB), colorless contaminant phenol, and photocurrent generation under visible-light irradiation. The heterostructured BiVO4/BiOI core/shell photocatalyst shows drastically enhanced photocatalysis properties compared to the pristine BiVO4 and BiOI. This remarkable enhancement is attributed to the intimate interfacial interactions derived from the core/shell heterostructure and formation of the p-n junction between the p-type BiOI and n-type BiVO4. Separation and transfer of photogenerated electron hole pairs are hence greatly facilitated, thereby resulting in the improved photocatalytic performance as confirmed by electrochemical, photoelectrochemical, radicals trapping, and superoxide radical (center dot O-2(-)) quantification results. Moreover, the core/shell BiVO4/BiOI also displays high photochemical stability. This work sheds new light on the construction of high-performance photocatalysts with core/shell heterostructures and matchable band structures in a simple and efficient way.

入藏号: WOS:000366153700030

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Chemistry, Multidisciplinary; Green & Sustainable Science & Technology; Engineering, Chemical

ISSN: 2168-0485

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 264 条，共 381 条

标题: Robust Feature Matching for Remote Sensing Image Registration via Locally Linear Transforming

作者: Ma, JY (Ma, Jiayi); Zhou, HB (Zhou, Huabing); Zhao, J (Zhao, Ji); Gao, Y (Gao, Yuan); Jiang, JJ (Jiang, Junjun); Tian, JW (Tian, Jinwen)

来源出版物: IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING 卷: 53 期: 12 页: 6469-6481 DOI: 10.1109/TGRS.2015.2441954 出版年: DEC 2015

Web of Science 核心合集中的 "被引频次": 269

被引频次合计: 284

摘要: Feature matching, which refers to establishing reliable correspondence between two sets of features (particularly point features), is a critical prerequisite in feature-based registration. In this paper, we propose a flexible and general algorithm, which is called locally linear transforming (LLT), for both rigid and nonrigid feature matching of remote sensing images. We start by creating a set of putative correspondences based on the feature similarity and then focus on removing outliers from the putative set and estimating the transformation as well. We formulate this as a maximum-likelihood estimation of a Bayesian model with hidden/latent variables indicating whether matches in the putative set are outliers or inliers. To ensure the well-posedness of the problem, we develop a local geometrical constraint that can preserve local structures among neighboring feature points, and it is also robust to a large number of outliers. The problem is solved by using the expectation-maximization algorithm (EM), and the closed-form solutions of both rigid and nonrigid transformations are derived in the maximization step. In the nonrigid case, we model the transformation between images in a reproducing kernel Hilbert space (RKHS), and a sparse approximation is applied to the transformation that reduces themethod computation complexity to linearithmic. Extensive experiments on real remote sensing images demonstrate accurate results of LLT, which outperforms current state-of-the-art methods, particularly in the case of severe outliers (even up to 80%).

入藏号: WOS:000361532400013

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Geochemistry & Geophysics; Engineering, Electrical & Electronic; Remote Sensing; Imaging Science & Photographic Technology

ISSN: 0196-2892

eISSN: 1558-0644

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 265 条，共 381 条

标题: Cretaceous-Cenozoic tectonic history of the Jiaojia Fault and gold mineralization in the Jiaodong Peninsula, China: constraints from zircon U-Pb, illite K-Ar, and apatite fission track thermochronometry

作者: Deng, J (Deng, Jun); Wang, CM (Wang, Changming); Bagas, L (Bagas, Leon); Carranza, EJM (Carranza, Emmanuel John M.); Lu, YJ (Lu, Yongjun)

来源出版物: MINERALIUM DEPOSITA 卷: 50 期: 8 页: 987-1006 DOI: 10.1007/s00126-015-0584-1 出版年: DEC 2015

Web of Science 核心合集中的 "被引频次": 121

被引频次合计: 137

摘要: The Jiaojia Fault (JJF) in the Jiaodong area of eastern China is an important NNE-trending structure that is subsidiary to the regional Tancheng-Lujiang (Tan-Lu) Fault Zone, and hosts > 1200 t of gold reserves contained in disseminated and stockwork ore, dominantly in the footwall of the fault. We present new zircon U-Pb, apatite fission track, and illite K-Ar data along the JJF and have delineated its tectonic history focusing on its formation and reactivation. Zircon U-Pb dating shows that the Shangzhuang granite is a composite body with ages between 132 +/- 1 and 127 +/- 1 Ma. Illite K-Ar ages for the fault's gouge range from 83 +/- 2 to 68 +/- 2 Ma, and the measured apatite fission track ages for ores are between 55 and 21 Ma. Previous zircon U-Pb geochronology and structural studies suggest that the JJF was originally activated in the Jurassic during 160-150 Ma as a sinistral fault. The JJF was a normal fault in the Early Cretaceous due to NW-SE orientated tension and NE-SW compression, which lasted from 135 to 120 Ma. This was followed by sinistral strike-slip faulting due to NW-SE compression and NE-SW tension during 120-110 Ma, and it changed to normal displacement at ca. 110 Ma. Our apatite fission track data analysis and thermal modeling of representative samples suggest that there was a subsequent dextral reactivation of the fault at ca. 55 Ma. Previous age data of ca. 130-110 Ma for gold mineralization along the JJF coincides with the Early Cretaceous magmatism and is coeval with the transition from normal faulting to sinistral strike-slip faulting of the JJF in Early Cretaceous, which is interpreted to be due to changing direction of the subducting Pacific Plate.

入藏号: WOS:000365081200005

出版商: SPRINGER

出版商地址: 233 SPRING ST, NEW YORK, NY 10013 USA

Web of Science 类别: Geochemistry & Geophysics; Mineralogy

ISSN: 0026-4598

eISSN: 1432-1866

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 266 条，共 381 条

标题: New results on stability analysis for systems with discrete distributed delay

作者: Zeng, HB (Zeng, Hong-Bing); He, Y (He, Yong); Wu, M (Wu, Min); She, JH (She, Jinhua)

来源出版物: AUTOMATICA 卷: 60 页: 189-192 DOI: 10.1016/j.automatica.2015.07.017 出版年: OCT 2015

Web of Science 核心合集中的 "被引频次": 199

被引频次合计: 209

摘要: The integral inequality technique is widely used to derive delay-dependent conditions, and various integral inequalities have been developed to reduce the conservatism of the conditions derived. In this study, a new integral inequality was devised that is tighter than existing ones. It was used to investigate the stability of linear systems with a discrete distributed delay, and a new stability condition was established. The results can be applied to systems with a delay belonging to an interval, which may be unstable when the delay is small or nonexistent. Three numerical examples demonstrate the effectiveness and the smaller conservatism of the method. (C) 2015 Elsevier Ltd. All rights reserved.

入藏号: WOS:000361073600024

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Automation & Control Systems; Engineering, Electrical & Electronic

ISSN: 0005-1098

eISSN: 1873-2836

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 267 条，共 381 条

标题: Total organic carbon, organic phosphorus, and biogenic barium fluxes as proxies for paleomarine productivity

作者: Schoepfer, SD (Schoepfer, Shane D.); Shen, J (Shen, Jun); Wei, HY (Wei, Hengye); Tyson, RV (Tyson, Richard V.); Ingall, E (Ingall, Ellery); Algeo, TJ (Algeo, Thomas J.)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 149 页: 23-52 DOI: 10.1016/j.earscirev.2014.08.017 出版年: OCT 2015

Web of Science 核心合集中的 "被引频次": 142

被引频次合计: 158

摘要: Although marine productivity is a key parameter in the global carbon cycle, reliable estimation of productivity in ancient marine systems has proven difficult. In this study, we evaluate the accumulation rates of three commonly used proxies for productivity from a set of primarily Quaternary sediment cores at 94 marine sites, compiled from 37 published sources. For each core, mass accumulation rates were calculated for total organic carbon (TOC), organic phosphorus (P-org), and biogenic barium (Ba-bio). Calculated mass accumulation rates were compared to two independent estimates of modern regional primary productivity and export productivity, as well as to two potential controlling variables, bulk accumulation rate (BAR) and redox environment. BAR was found to exercise a strong control on the preservation of organic carbon. The linear regression equations relating preservation factor to BAR can be transformed to yield equations for primary and export production as a function of TOC and BAR, two variables that can be readily measured or estimated in paleomarine systems. Paleoproductivity can also be estimated from empirical relationships between elemental proxy fluxes and modern productivity rates. Although these equations do not attempt to correct for preservation, organic carbon and phosphorus (but not barium) accumulations rates were found to exhibit a systematic relationship to primary and export production. All of the paleoproductivity equations developed here have a large associated uncertainty and, so, must be regarded as yielding order-of-magnitude estimates.

Relationships between proxy fluxes and BAR provide insights regarding the dominant influences on each elemental proxy. Increasing BAR exerts (1) a strong preservational effect on organic carbon that is substantially larger in oxic facies than in suboxic/anoxic facies, (2) a weak clastic-dilution effect that is observable for organic phosphorus (but not for organic carbon or biogenic barium, owing to other dominant influences on these proxies), and (3) a large negative effect on biogenic barium that is probably due to reduced uptake of barium at the sediment water interface. These effects became evident through analysis of our globally integrated dataset; analysis of individual marine sedimentary units most commonly reveals autocorrelations between elemental proxy fluxes and BAR as a result of the latter being a factor in the calculation of the former. We conclude that organic carbon and phosphorus fluxes have considerable potential as widely useful paleoproductivity proxies, but that the applicability of biogenic barium fluxes may be limited to specific oceanic settings. (C) 2014 Elsevier B.V. All rights reserved.

入藏号: WOS:000362381800003

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 268 条，共 381 条

标题: Free-Matrix-Based Integral Inequality for Stability Analysis of Systems With Time-Varying Delay

作者: Zeng, HB (Zeng, Hong-Bing); He, Y (He, Yong); Wu, M (Wu, Min); She, JH (She, Jinhua)

来源出版物: IEEE TRANSACTIONS ON AUTOMATIC CONTROL 卷: 60 期: 10 页: 2768-2772 DOI: 10.1109/TAC.2015.2404271 出版年: OCT 2015

Web of Science 核心合集中的 "被引频次": 427

被引频次合计: 452

摘要: The free-weighting matrix and integral-inequality methods are widely used to derive delay-dependent criteria for the stability analysis of time-varying-delay systems because they avoid both the use of a model transformation and the technique of bounding cross terms. This technical note presents a new integral inequality, called a free-matrix-based integral inequality, that further reduces the conservativeness in those methods. It includes well-known integral inequalities as special cases. Using it to investigate the stability of systems with time-varying delays yields less conservative delay-dependent stability criteria, which are given in terms of linear matrix inequalities. Two numerical examples demonstrate the effectiveness and superiority of the method.

入藏号: WOS:000367284100023

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Automation & Control Systems; Engineering, Electrical & Electronic

ISSN: 0018-9286

eISSN: 1558-2523

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 269 条，共 381 条

标题: Geology and genesis of the giant Beiya porphyry-skarn gold deposit, northwestern Yangtze Block, China

作者: Deng, J (Deng, Jun); Wang, QF (Wang, Qingfei); Li, GJ (Li, Gongjian); Hou, ZQ (Hou, Zengqian); Jiang, CZ (Jiang, Chengzhu); Danyushevsky, L (Danyushevsky, Leonid)

来源出版物: ORE GEOLOGY REVIEWS 卷: 70 页: 457-485 DOI: 10.1016/j.oregeorev.2015.02.015 出版年: OCT 2015

Web of Science 核心合集中的 "被引频次": 111

被引频次合计: 128

摘要: The Beiya ore deposit is located in the northwestern Yangtze Block, to the southeast of the Tibetan Plateau, SW China. The deposit is hosted by a porphyritic monzogranitic stock that is cross-cut by a porphyritic granite and later lamprophyre dikes. The whole-rock geochemistry of the porphyritic monzogranite and granite intrusions is both potassic and adakite-like, as evidenced by high K2O/Na2O (2.2 to 24.8), Sr/Y (53.2 to 143.2), and (La/Yb)(N) (4.9 to 28.9) ratios. Both intrusions have comparable zircon U-Pb ages of ca. 36 Ma and epsilon Hf(t) values of -6.8 to +2.7. Zircons within these intrusions have Hf isotope crustal model ages with a prominent peak at ca. 840 Ma, and both of the intrusions have similar Sr-Nd-Pb isotopic compositions that are comparable to the compositions of amphibolite xenoliths hosted by potassic felsic intrusions in western Yunnan. The contemporaneous lamprophyre dikes show Nb-Ta depletion, enriched (Sr-87/Sr-86)(i) and epsilon Nd(t), and extremely low Nb/U ratios (1.6-3.6), suggesting that these dikes were formed from magmas generated by partial melting of a metasomatized subcontinental lithospheric mantle (SCLM). The geochemistry of the porphyritic intrusions and the lamprophyre dikes suggests that the Beiya porphyries formed as a result of partial melting of a thickened and K-rich region of the lower crust, triggered by melting of metasomatized SCLM. The ca. 840 Ma U-Pb ages and epsilon Hf(t) values (-6.8 to +2.7) of xenocrystic zircons within the porphyritic intrusions suggest that these zircons were produced in a continental arc setting at ca. 840 Ma. The peak Hf model age of the zircons crystallized from the intrusions and the U-Pb ages of the xenocrystic zircons within the intrusions suggest that these porphyritic intrusions formed from magmas sourced from a juvenile crust that formed at ca. 840 Ma. This juvenile crust is most likely the source for the metals within the porphyry-skarn deposits in the study area, as the SCLM-derived lamprophyre dikes in this area are barren.

Massive Fe-Au orebodies (similar to 99 million metric tons at an average grade of 2.61 g/t Au) within the study area are generally located within the skarn-altered boundary of the porphyritic monzogranite stock and along the faults in the surrounding Triassic carbonates. The Fe-Au orebodies are spatially and genetically associated with skarn comprising garnet and diopside. Petrographic observations show that the massive Fe-Au orebodies mainly consist of hematite and magnetite with disseminated pyrite that hosts native gold and electrum.

The porphyritic granite contains porphyry-style mineralization in the form of disseminated and veinlet-hosted pyrite and chalcopyrite. Pyrite-hosted lattice-bound gold is present within both the massive Fe-Au and the porphyry-type mineralization in the study area, and is present at concentrations up to 10 ppm Au (as determined by in situ LA-ICP-MS analysis). Subsequent weathering altered the primary magnetite-hematite-sulfide assemblage in the Fe-Au orebody into a magnetite-limonite assemblage, and generated laterite-type mineralization in which gold is hosted by limonite. (C) 2015 Elsevier B.V. All rights reserved.

入藏号: WOS:000356734500027

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geology; Mineralogy; Mining & Mineral Processing

ISSN: 0169-1368

eISSN: 1872-7360

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 270 条，共 381 条

标题: Ophiolites in the Xing'an-Inner Mongolia accretionary belt of the CAOB: Implications for two cycles of seafloor spreading and accretionary orogenic events

作者: Song, SG (Song, Shuguang); Wang, MM (Wang, Ming-Ming); Xu, X (Xu, Xin); Wang, C (Wang, Chao); Niu, YL (Niu, Yaoling); Allen, MB (Allen, Mark B.); Su, L (Su, Li)

来源出版物: TECTONICS 卷: 34 期: 10 页: 2221-2248 DOI: 10.1002/2015TC003948 出版年: OCT 2015

Web of Science 核心合集中的 "被引频次": 119

被引频次合计: 134

摘要: The Xing'an-Inner Mongolia accretionary belt in the southeastern segment of the Central Asian Orogenic Belt (CAOB) was produced by the long-lived subduction and eventual closure of the Paleo-Asian Ocean and by the convergence between the North China Craton and the Mongolian microcontinent. Two ophiolite belts have been recognized: the northern Erenhot-Hegenshan-Xi-Ujimqin ophiolite belt and the southern Solonker-Linxi ophiolite belt. Most basalts in the northern ophiolite belt exhibit characteristics of normal-type to enriched-type mid-ocean ridge basalt affinities with depleted Nd isotopic composition (epsilon(Nd)(t)>+5), comparable to modern Eastern Pacific mid-ocean ridge basalts. Most basaltic rocks in the southern belt show clear geochemical features of suprasubduction zone-type oceanic crust, probably formed in an arc/back-arc environment. The inferred back-arc extension along the Solonker-Linxi belt started at circa 280 Ma. Statistics of all the available age data for the ophiolites indicates two cycles of seafloor spreading/subduction, which gave rise to two main epochs of magmatic activity at 500-410 Ma and 360-220 Ma, respectively, with a gap of similar to 50 million years (Myr). The spatial and temporal distribution of the ophiolites and concurrent igneous rocks favor bilateral subduction toward the two continental margins in the convergence history, with final collision at similar to 230-220 Ma. In the whole belt, signals of continental collision and Himalayan-style mountain building are lacking. We thus conclude that the Xing'an-Inner Mongolia segment of the CAOB experienced two cycles of seafloor subduction, back-arc extension, and final "Appalachian-type" soft collision.

入藏号: WOS:000366753100011

出版商: AMER GEOPHYSICAL UNION

出版商地址: 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0278-7407

eISSN: 1944-9194

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 271 条，共 381 条

标题: Magmatic record of India-Asia collision

作者: Zhu, DC (Zhu, Di-Cheng); Wang, Q (Wang, Qing); Zhao, ZD (Zhao, Zhi-Dan); Chung, SL (Chung, Sun-Lin); Cawood, PA (Cawood, Peter A.); Niu, YL (Niu, Yaoling); Liu, SA (Liu, Sheng-Ao); Wu, FY (Wu, Fu-Yuan); Mo, XX (Mo, Xuan-Xue)

来源出版物: SCIENTIFIC REPORTS 卷: 5 文献号: 14289 DOI: 10.1038/srep14289 出版年: SEP 23 2015

Web of Science 核心合集中的 "被引频次": 190

被引频次合计: 231

摘要: New geochronological and geochemical data on magmatic activity from the India-Asia collision zone enables recognition of a distinct magmatic flare-up event that we ascribe to slab breakoff. This tie-point in the collisional record can be used to back-date to the time of initial impingement of the Indian continent with the Asian margin. Continental arc magmatism in southern Tibet during 80-40 Ma migrated from south to north and then back to south with significant mantle input at 70-43 Ma. A pronounced flare up in magmatic intensity (including ignimbrite and mafic rock) at ca. 52-51 Ma corresponds to a sudden decrease in the India-Asia convergence rate. Geological and geochemical data are consistent with mantle input controlled by slab rollback from ca. 70 Ma and slab breakoff at ca. 53 Ma. We propose that the slowdown of the Indian plate at ca. 51 Ma is largely the consequence of slab breakoff of the subducting Neo-Tethyan oceanic lithosphere, rather than the onset of the India-Asia collision as traditionally interpreted, implying that the initial India-Asia collision commenced earlier, likely at ca. 55 Ma.

入藏号: WOS:000361599000001

PubMed ID: 26395973

出版商: NATURE PUBLISHING GROUP

出版商地址: MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

Web of Science 类别: Multidisciplinary Sciences

ISSN: 2045-2322

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 272 条，共 381 条

标题: Orogenic gold: Common or evolving fluid and metal sources through time

作者: Goldfarb, RJ (Goldfarb, Richard J.); Groves, DI (Groves, David I.)

来源出版物: LITHOS 卷: 233 特刊: SI 页: 2-26 DOI: 10.1016/j.lithos.2015.07.011 出版年: SEP 15 2015

Web of Science 核心合集中的 "被引频次": 306

被引频次合计: 334

摘要: Orogenic gold deposits of all ages, from Paleoarchean to Tertiary, show consistency in chemical composition. They are the products of aqueous-carbonic fluids, with typically 5-20 mol% CO2, although unmixing during extreme pressure fluctuation can lead to entrapment of much more CO2-rich fluid inclusions in some cases. Ore fluids are typically characterized by significant concentrations of CH4 and/or N-2, common estimates of 0.01-0.36 mol% H2S, a near-neutral pH of 5.5, and salinities of 3-7 wt% NaCl equiv., with Na > K > > Ca,Mg. This fluid composition consistency favors an ore fluid produced from a single source area and rules out mixing of fluids from multiple sources as significant in orogenic gold formation. Nevertheless, there are broad ranges in more robust fluid-inclusion trapping temperatures and pressures between deposits that support a model where this specific fluid may deposit ore over a broad window of upper to middle crustal depths.

Much of the reported isotopic and noble gas data is inconsistent between deposits, leading to the common equivocal interpretations from studies that have attempted to define fluid and metal source areas for various orogenic gold provinces. Fluid stable isotope values are commonly characterized by the following ranges: (1) delta O-18 for Precambrian ores of + 6 to +11 parts per thousand and for Phanerozoic ores of +7 to +13 parts per thousand; (2) delta D and delta S-34 values that are extremely variable; (3) delta C-13 values that range from -11 to -2 parts per thousand; and (4)delta N-15 of + 10 to + 24 parts per thousand for the Neoarchean, + 6.5 to +12 parts per thousand. for the Paleoproterozoic, and + 1.5 to + 10 parts per thousand for the Phanerozoic. Secular variations in large-scale Earth processes appear to best explain some of the broad ranges in the O, S, and N data. Fluid:rock interaction, particularly in ore trap areas, may cause important local shifts in the O, S, and C ratios. The extreme variations in delta D mainly reflect measurements of hydrogen isotopes by bulk extraction of waters from numerous fluid inclusion generations, many which are not related to ore formation. Radiogenic isotopes, such as those of Pb, Sr, Nd, Sm, and Os, measured on hydrothermal minerals are even more difficult to interpret for defining metal source, particularly as the low-salinity ore fluids transport limited amounts of these elements and significant amounts of these may be locall added to the minerals during alteration reactions at the sites of gold deposition. Noble gas and halogen data are equally equivocal.

Fluid exsolution from granitoids emplaced into the upper and middle crust, metamorphism of the crust, or fluids entering trans-crustal fault zones from below the crust all remain as permissive scenarios associated with orogenic gold formation, as the abundant geochemical data are equivocal. However, geological and geochronological data weigh heavily against a magmatic-hydrothermal model in the upper to middle crust. There is no universal temporal association between orogenic gold and magmatism, and where there is an overlap in age, there is no specific type of magmatism consistently associated with gold formation, nor element zonation around any specific pluton. A crustal metamorphic model for fluid and metal sources is very consistent with geological, geochronological, and geochemical data, although metamorphism on a regional scale that releases these components into major fault zones can be associated with many processes along active continental margins. These can include crustal thickening and radiogenic heating, slab rollback and heating during crustal extension, or subduction of a spreading ridge heating the base of an accretionary prism. In rare examples where Phanerozoic orogenic gold deposits are hosted in Precambrian high-grade metamorphic terranes, fluids and metals must, however, enter a transcrustal fault system from a sub-crustal source. This could either be a devolatilized, subducted, relatively flat, perhaps stalled slab and its overlying sediment, or the corner of the fertilized mantle wedge that releases a fluid during a thermal event. Published by Elsevier B.V.

入藏号: WOS:000361576900002

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geochemistry & Geophysics; Mineralogy

ISSN: 0024-4937

eISSN: 1872-6143

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 273 条，共 381 条

标题: Lithospheric Architecture of the Lhasa Terrane and Its Control on Ore Deposits in the Himalayan-Tibetan Orogen

作者: Hou, ZQ (Hou, Zengqian); Duan, LF (Duan, Lianfeng); Lu, YJ (Lu, Yongjun); Zheng, YC (Zheng, Yuanchuan); Zhu, DC (Zhu, Dicheng); Yang, ZM (Yang, Zhiming); Yang, ZS (Yang, Zhusen); Wang, BD (Wang, Baodi); Pei, YR (Pei, Yingru); Zhao, ZD (Zhao, Zhidan); McCuaig, TC (McCuaig, T. Campbell)

来源出版物: ECONOMIC GEOLOGY 卷: 110 期: 6 页: 1541-1575 DOI: 10.2113/econgeo.110.6.1541 出版年: SEP-OCT 2015

Web of Science 核心合集中的 "被引频次": 163

被引频次合计: 223

摘要: Magmatic-hydrothermal ore deposits in collisional orogens are new targets for modern mineral exploration, yet it is unclear why they preferentially occur in some specific tectonic environments within these orogenic belts. We integrate geologic and geochemical data (especially zircon U-Pb dating and Lu-Hf isotope data) for Mesozoic-Cenozoic magmatic rocks and associated ore deposits in the Lhasa terrane, a highly endowed tectonic unit within the Himalayan-Tibetan orogen, and provide the first example in a continental collision terrane of the application of zircon Hf isotope data to image the lithospheric architecture and its relationship with ore deposits.

Three crustal blocks are identified within the Lhasa terrane by the Hf isotope mapping method. They include a central long-lived Precambrian microcontinent with local reworking and two surrounding juvenile Phanerozoic crustal blocks with significant mantle contributions to constituent magmatic rocks. The three crustal blocks are bounded by two E-W-trending terrane-boundary faults, and each block is cut by two N-S striking concealed faults. Isotopic signatures of zircons from the juvenile crustal blocks indicate that the Phanerozoic continental crust grew from several Mesozoic volcanic-plutonic arcs and by underplating of mantle-derived magmas generated during Mesozoic accretion and Cenozoic collision.

Mesozoic subduction-related porphyry Cu-Au deposits and Cenozoic collision-related Cu-Mo deposits are exclusively located in regions with high exf (>5) juvenile crust. Cu enrichment during differentiation of high foe arc magmas is the key for the formation of Mesozoic subduction-related porphyry Cu-Au. By contrast, remelting of the lower crustal Cu sulfide-rich magmatic cumulates within the juvenile crust is interpreted to have played a key role in the formation of Cenozoic collision-related Cu-Mo deposits.

Granite-related Pb-Zn deposits cluster in the oldest crustal regions or developed along the margin of the old crustal block bounded by lithospheric faults. The porphyry Mo deposits are localized along the reworked margins of the old crustal block. It is suggested that crustal reworking released Mo from the old crust to form porphyry Mo deposits, whereas leaching of Pb and Zn from the Paleozoic carbonate cover strata by felsic intrusion-driven fluids is critical to the formation of Pb-Zn ore deposits.

Skarn Fe-Cu ore deposits are typically localized along a terrane boundary fault, i.e., lithospheric discontinuity, through which crust-derived felsic melt mixed with Cu-rich mantle-derived mafic magmas ascending upward. Associated granitoid rocks usually bear microgranular mafic enclaves and show a zircon Hf isotope array from negative to positive Enf values (-7.3 to +6.7), supporting mixing of juvenile mantle and evolved crustal sources.

The Hf isotope maps show temporal-spatial relationships between crustal structure and the location of ore deposits, demonstrating that the structure, nature, and composition of the crust controlled the localization of ore deposits and the migration of ore-forming metals in the terrane. This study shows that the lithospheric architecture of an orogenic terrane can be imaged by Hf isotope mapping to provide mappable units which can be used to explore for ore deposits at the terrane scale.

入藏号: WOS:000370768600008

出版商: SOC ECONOMIC GEOLOGISTS, INC

出版商地址: 7811 SCHAFFER PARKWAY, LITTLETON, CO 80127 USA

Web of Science 类别: Geochemistry & Geophysics; Mineralogy

ISSN: 0361-0128

eISSN: 1554-0774

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 274 条，共 381 条

标题: Decratonic gold deposits

作者: Zhu, RX (Zhu RiXiang); Fan, HR (Fan HongRui); Li, JW (Li JianWei); Meng, QR (Meng QingRen); Li, SR (Li ShengRong); Zeng, QD (Zeng QingDong)

来源出版物: SCIENCE CHINA-EARTH SCIENCES 卷: 58 期: 9 页: 1523-1537 DOI: 10.1007/s11430-015-5139-x 出版年: SEP 2015

Web of Science 核心合集中的 "被引频次": 146

被引频次合计: 160

摘要: The North China craton (NCC) hosts numerous gold deposits and is known as the most gold-productive region of China. The gold deposits were mostly formed within a few million years in the Early Cretaceous (130-120 Ma), coeval with widespread occurrences of bimodal magmatism, rift basins and metamorphic core complexes that marked the peak of lithospheric thinning and destruction of the NCC. Stable isotope data and geological evidence indicate that ore-forming fluids and other components were largely exsolved from cooling magma and/or derived from mantle degassing during the period of lithospheric extension. Gold mineralization in the NCC contrasts strikingly with that of other cratons where gold ore-forming fluids were sourced mostly from metamorphic devolatization in compressional or transpressional regimes. In this paper, we present a summary and discussion on time-space distribution and ore genesis of gold deposits in the NCC in the context of the timing, spatial variation, and decratonic processes. Compared with orogenic gold deposits in other cratonic blocks, the Early Cretaceous gold deposits in the NCC are quite distinct in that they were deposited from magma-derived fluids under extensional settings and associated closely with destruction of cratonic lithosphere. We argue that Early Cretaceous gold deposits in the NCC cannot be classified as orogenic gold deposits as previously suggested, rather, they are a new type of gold deposits, termed as "decratonic gold deposits" in this study. The westward subduction of the paleo-West Pacific plate (the Izanagi plate) beneath the eastern China continent gave rise to an optimal tectonic setting for large-scale gold mineralization in the Early Cretaceous. Dehydration of the subducted and stagnant slab in the mantle transition zone led to continuous hydration and considerable metasomatism of the mantle wedge beneath the NCC. As a consequence, the refractory mantle became oxidized and highly enriched in large ion lithophile elements and chalcophile elements (e.g., Cu, Au, Ag and Te). Partial melting of such a mantle would have produced voluminous hydrous, Au- and S-bearing basaltic magma, which, together with crust-derived melts induced by underplating of basaltic magma, served as an important source for ore-forming fluids. It is suggested that the Eocene Carlin-type gold deposits in Nevada, occurring geologically in the deformed western margin of the North America craton, are comparable with the Early Cretaceous gold deposits of the NCC because they share similar tectonic settings and auriferous fluids. The NCC gold deposits are characterized by gold-bearing quartz veins in the Archean amphibolite facies rocks, whereas the Nevada gold deposits are featured by fine-grained sulfide dissemination in Paleozoic marine sedimentary rocks. Their main differences in gold mineralization are the different host rocks, ore-controlling structures, and ore-forming depth. The similar tectonic setting and ore-forming fluid source, however, indicate that the Carlin-type gold deposits in Nevada are actually analogous to decratonic gold deposits in the NCC. Gold deposits in both the NCC and Nevada were formed in a relatively short time interval (< 10 Myr) and become progressively younger toward the subduction zone. Younging of gold mineralization toward subduction zone might have been attributed to retreat of subduction zone and rollback of subducted slab.

According to the ages of gold deposits on inland and marginal zones, the retreat rates of the Izanagi plate in the western Pacific in the Early Cretaceous and the Farallon plate of the eastern Pacific in the Eocene are estimated at 8.8 cm/yr and 3.3 cm/yr, respectively.

入藏号: WOS:000360092500005

出版商: SCIENCE PRESS

出版商地址: 16 DONGHUANGCHENGGEN NORTH ST, BEIJING 100717, PEOPLES R CHINA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1674-7313

eISSN: 1869-1897

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 275 条，共 381 条

标题: Early Paleozoic and Early Mesozoic intraplate tectonic and magmatic events in the Cathaysia Block, South China

作者: Shu, LS (Shu, Liangshu); Wang, B (Wang, Bo); Cawood, PA (Cawood, Peter A.); Santosh, M (Santosh, M.); Xu, ZQ (Xu, Zhiqin)

来源出版物: TECTONICS 卷: 34 期: 8 页: 1600-1621 DOI: 10.1002/2015TC003835 出版年: AUG 2015

Web of Science 核心合集中的 "被引频次": 120

被引频次合计: 136

摘要: The geodynamic framework of the South China Craton in the Early Paleozoic and Early Mesozoic has been modeled as developing through either oceanic convergence or intracontinental settings. On the basis of an integrated structural, geochemical, zircon U-Pb and Hf isotopic, and mica Ar-40/Ar-39 geochronologic study we establish that an intracontinental setting is currently the best fit for the available data. Our results suggest that widespread tectonomagmatic activity involving granite emplacement and mylonitic deformation occurred during two distinct stages: similar to 435-415 Ma and similar to 230-210 Ma. The coeval nature of emplacement of the plutons and their ductile deformation is corroborated by the subparallel orientation of the mylonitic foliation along the pluton margins, gneissose foliation in the middle part of pluton, the magmatic foliation within the plutons, and the schistosity in the surrounding metamorphosed country rocks. The 435-415 Ma granitoids exhibit peraluminous, high-K characteristics, and zircons show negative epsilon Hf(t) values (average -6.2, n =66), and Paleoproterozoic two-stage model ages of circa 2.21-1.64 Ga (average 1.84 Ga). The data suggest that the Early Paleozoic plutons were derived from the partial melting of the Paleoproterozoic basement of the Cathaysia Block. The 230-210 Ma granites are potassic and have zircons with Hf(t) values of -2.8 - -8.7 (average 5.4, n =62), corresponding to T-DM2 ages ranging from 2.0 to 1.44 Ga (average 1.64 Ga), suggesting that the Early Mesozoic partial melts in Cathaysia were also derived from basement. The geochemical distinction between the two phases of granites traces continental crustal evolution with time, with the Early Mesozoic crust enriched in potassium, silicon, and aluminum, but deficient in calcium, relative to the Paleozoic crust. Kinematical investigations provide evidence for an early-stage ductile deformation with a doubly vergent thrusting pattern dated at 433 +/- 1 to 428 +/- 1 Ma (Ar-40/Ar-39 furnace step-heating pseudoplateau ages obtained on muscovite and biotite from mylonite and deformed granite) and a late-stage strike-slip movement with sinistral sense of ductile shearing at 232 +/- 1 to 234 +/- 1 Ma (Ar-40/Ar-39 furnace step-heating pseudoplateau ages) along an E-W direction. The geological, geochemical, and isotopic signatures likely reflect far-field effects in response to continental assembly events at these times.

入藏号: WOS:000364139200003

出版商: AMER GEOPHYSICAL UNION

出版商地址: 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0278-7407

eISSN: 1944-9194

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 276 条，共 381 条

标题: Paleoproterozoic arc magmatism in the North China Craton: No Siderian global plate tectonic shutdown

作者: Yang, QY (Yang, Qiong-Yan); Santosh, M (Santosh, M.)

来源出版物: GONDWANA RESEARCH 卷: 28 期: 1 页: 82-105 DOI: 10.1016/j.gr.2014.08.005 出版年: AUG 2015

Web of Science 核心合集中的 "被引频次": 113

被引频次合计: 117

摘要: Arc magmatism in convergent plate margins has been a major contributor to continental growth. Following arc-arc and arc-continent collisions in the Archean leading to the amalgamation of micro-blocks, the North China Craton (NCC) witnessed major pulses of continental arc magmatism during the Paleoproterozoic. In this study, we present geochemistry, zircon U-Pb geochronology and Lu-Hf isotope data from a suite of magmatic rocks sampled from the region of confluence of two major Paleoproterozoic suture zones in the NCC the Inner Mongolia Suture Zone (IMSZ) and the Trans-North China Orogen (TNCO). Our zircon U-Pb geochronological data indicate new zircon growth during multiple tectonothermal events as displayed in the Pb-207/Pb-206 weighted mean ages of 2410 +/- 41 Ma for metagranite, 2480 +/- 12 Ma, 2125 +/- 18 Ma, 1946 +/- 8 Ma, 1900 +/- 15 Ma and 1879 +/- 12 Ma from metagabbros, 2446 +/- 11 Ma from charnockite, and 1904 +/- 6 Ma and 1901 +/- 9 Ma from metatuffs. The Pb-207/Pb-206 upper intercept age of zircons in the khondalite shows 2102 +/- 76 Ma which is identical to the age obtained from the magmatic zircons in one of the metagabbros. The khondalites also carry a group of concordant metamorphic zircons with Pb-207/Pb-206 mean age of 1881 +/- 20 Ma. Metamorphic zircons in the gabbros and charnockites also yield similar ages of 1890 +/- 14 Ma and 1852 +/- 19 Ma respectively. The age data suggest prolonged arc magmatism in a convergent margin setting during ca. 2.48 to 1.9 Ga, followed by metamorphism at ca. 1.89-1.85 Ga associated with the final collision. Lu-Hf analyses reveal that the dominant populations of zircons from all the rock types are characterized by positive epsilon Hf values (-1.9 to 6.8; mean 1.8). The epsilon Hf and T-DM(C) data suggest that the magmas were mostly derived from Neoarchean and Paleoproterozoic juvenile components. The salient geochemical features of these rocks attest to magma generation from heterogeneous sources involving subduction-derived arc components with minor input from continental crust. The results presented in this study, together with those from previous investigations in different domains of the IMSZ and TNCO suggest major Paleoproterozoic arc magmatic events in the NCC lasting for nearly 600 million years associated with the final assembly of the crustal blocks into a coherent craton. Construction of the final cratonic architecture of the NCC thus witnessed not only the arc-continent amalgamations at 2.7-2.5 Ga, but also major crust building events in the Paleoproterozoic through melts generated from juvenile and recycled components in continental magmatic arc systems along an active convergent margin, followed by intense deformation and metamorphism during the final collision at 1.85-1.80 Ga. The prominent Paleoproterozoic magmatic records in the NCC do not support the proposal of global plate tectonic shutdown in the Siderian and confirm vigorous convergent margin magmatism and crust building processes throughout the Paleoproterozoic. (C) 2014 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000356743000005

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 277 条，共 381 条

标题: A Graphene-like Oxygenated Carbon Nitride Material for Improved Cycle-Life Lithium/Sulfur Batteries

作者: Liu, JH (Liu, Jinghai); Li, WF (Li, Wanfei); Duan, LM (Duan, Limei); Li, X (Li, Xin); Ji, L (Ji, Lei); Geng, ZB (Geng, Zhibin); Huang, KK (Huang, Keke); Lu, LH (Lu, Luhua); Zhou, LS (Zhou, Lisha); Liu, ZR (Liu, Zongrui); Chen, W (Chen, Wei); Liu, LW (Liu, Liwei); Feng, SH (Feng, Shouhua); Zhang, YG (Zhang, Yuegang)

来源出版物: NANO LETTERS 卷: 15 期: 8 页: 5137-5142 DOI: 10.1021/acs.nanolett.5b01919 出版年: AUG 2015

Web of Science 核心合集中的 "被引频次": 238

被引频次合计: 242

摘要: Novel sulfur (5) anchoring materials and the corresponding mechanisms for suppressing capacity fading are urgently needed to advance the performance of Li/S batteries. Here, we designed and synthesized a graphene-like oxygenated carbon nitride (OCN) host material that contains tens of micrometer scaled two-dimensional (2D) rippled sheets, micromesopores, and oxygen heteroatoms. N content can reach as high as 20.49 wt %. A sustainable approach of one-step self-supporting solid-state pyrolysis (OSSP) was developed for the low-cost and large-scale production of OCN. The urea in solid sources not only provides self-supporting atmospheres but also produces graphitic carbon nitride (g-C3N4) working as 2D layered templates. The S/OCN cathode can deliver a high specific capacity of 1407.6 mA h g(-1) at C/20 rate with 84% S utilization and retain improved reversible capacity during long-term cycles at high current density. The increasing micropores, graphitic N, ether, and carboxylic 0 at the large sized OCN sheet favor S utilization and trapping for polysulfides.

入藏号: WOS:000359613700043

PubMed ID: 26148211

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Chemistry, Multidisciplinary; Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied; Physics, Condensed Matter

ISSN: 1530-6984

eISSN: 1530-6992

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 278 条，共 381 条

标题: Anionic Group Self-Doping as a Promising Strategy: Band-Gap Engineering and Multi-Functional Applications of High-Performance CO32--Doped Bi2O2CO3

作者: Huang, HW (Huang, Hongwei); Li, XW (Li, Xiaowei); Wang, JJ (Wang, Jinjian); Dong, F (Dong, Fan); Chu, PK (Chu, Paul K.); Zhang, TR (Zhang, Tierui); Zhang, YH (Zhang, Yihe)

来源出版物: ACS CATALYSIS 卷: 5 期: 7 页: 4094-4103 DOI: 10.1021/acscatal.5b00444 出版年: JUL 2015

Web of Science 核心合集中的 "被引频次": 506

被引频次合计: 507

摘要: We herein demonstrate self-doping of the CO32- anionic group into a wide bandgap semiconductor Bi2O2CO3 realized by a one-pot hydrothermal technique. The photoresponsive range of the self-doped Bi2O2CO3 can be extended from UV to visible light and the band gap can be continuously tuned. Density functional theory (DFT) calculation results demonstrate that the foreign CO32- ions are doped in the caves constructed by the four adjacent CO32- ions and the CO32- self-doping can effectively narrow the band gap of Bi2O2CO3 by lowering the conduction band position and meanwhile generating impurity level. The photocatalytic performance is evaluated by monitoring NO removal from the gas phase, photodegradation of a colorless contaminant (bisphenol A, BPA) in an aqueous solution, and photocurrent generation. In comparison with the pristine Bi2O2CO3 which is not sensitive to visible light, the self-doped Bi2O2CO3 exhibits drastically enhanced visible-light photoreactivity, which is also superior to that of many other well-known photocatalysts such as P25, C3N4, and BiOBr. The highly enhanced photocatalytic performance is attributed to combination of both efficient visible light absorption and separation of photogenerated electron hole pairs. The self-doped Bi2O2CO3 also shows decent photochemical stability, which is of especial importance for its practical applications. This work demonstrates that self-doping with an anionic group enables the band gap engineering and the design of high-performance photocatalysts sensitive to visible light.

入藏号: WOS:000357626800024

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Chemistry, Physical

ISSN: 2155-5435

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 279 条，共 381 条

标题: Effects of vegetation on runoff and soil erosion on reclaimed land in an opencast coal-mine dump in a loess area

作者: Zhang, L (Zhang, Ling); Wang, JM (Wang, Jinman); Bai, ZK (Bai, Zhongke); Lv, CJ (Lv, Chunjuan)

来源出版物: CATENA 卷: 128 页: 44-53 DOI: 10.1016/j.catena.2015.01.016 出版年: MAY 2015

Web of Science 核心合集中的 "被引频次": 117

被引频次合计: 137

摘要: Vegetation reconstruction on opencast coal-mine dumps is an effective way to reduce runoff and soil erosion and is a key to restoring ecosystems in ecologically sensitive regions. To investigate the effects of vegetation on runoff and erosion, a field experiment involving eight erosion plots was conducted on a dump at the Antaibao opencast coal mine in, Shanxi Province. The plots were divided into two location groups, platforms and slopes. Each plot was planted with a typical vegetation pattern. The volumes of runoff and soil erosion during each rainfall event were recorded during the rainy season. The results showed that plots on the platforms experienced a larger volume of runoff than plots on the slopes, while the slope plots generated a larger value of soil erosion than the platform plots. Vegetation restoration has different impacts on runoff and soil erosion. A plot covered with 1-year-old Robinia pseudoacacia and Hippophae rhamnoides was most effective in terms of soil conservation; the plots covered with 5-year-old mixed legume plants and 5-year-old mixed grass-shrub-arbor forest were most effective overall in preventing both runoff and soil erosion. Over the long term, vegetation can increase soil organic matter, improve soil physical properties and soil anti-erodibility, and reduce runoff and erosion to a safe level. This study provides a theoretical basis and technical support for land reclamation and soil and water conservation in vulnerable ecological mining regions of a loess plateau. (C) 2015 Elsevier B.V. All rights reserved.

入藏号: WOS:000351806600004

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary; Soil Science; Water Resources

ISSN: 0341-8162

eISSN: 1872-6887

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 280 条，共 381 条

标题: Further results on exponential stability of neural networks with time-varying delay

作者: Ji, MD (Ji, Meng-Di); He, Y (He, Yong); Wu, M (Wu, Min); Zhang, CK (Zhang, Chuan-Ke)

来源出版物: APPLIED MATHEMATICS AND COMPUTATION 卷: 256 页: 175-182 DOI: 10.1016/j.amc.2015.01.004 出版年: APR 1 2015

Web of Science 核心合集中的 "被引频次": 56

被引频次合计: 57

摘要: This paper investigates the problem of the exponential stability for a class of neural networks with time-varying delay. A triple integral term and a term considering the delay information in a new way are introduced to the Lyapunov-Krasovskii functional (LKF). The obtained criterion show advantages over the existing ones since not only a novel LKF is constructed but also several techniques such as Wirtinger-based inequality and convex combination technique are used to estimate the upper bound of the derivative of the LKF. Finally, a numerical example is provided to verify the effectiveness and benefit of the proposed criterion. (C) 2015 Elsevier Inc. All rights reserved.

入藏号: WOS:000349979300016

出版商: ELSEVIER SCIENCE INC

出版商地址: STE 800, 230 PARK AVE, NEW YORK, NY 10169 USA

Web of Science 类别: Mathematics, Applied

ISSN: 0096-3003

eISSN: 1873-5649

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 281 条，共 381 条

标题: RECENT ADVANCES ON FRACTAL MODELING OF PERMEABILITY FOR FIBROUS POROUS MEDIA

作者: Cai, JC (Cai, Jianchao); Luo, L (Luo, Liang); Ye, R (Ye, Ran); Zeng, XF (Zeng, Xiangfeng); Hu, XY (Hu, Xiangyun)

来源出版物: FRACTALS-COMPLEX GEOMETRY PATTERNS AND SCALING IN NATURE AND SOCIETY 卷: 23 期: 1 文献号: 1540006 DOI: 10.1142/S0218348X1540006X 出版年: MAR 2015

Web of Science 核心合集中的 "被引频次": 76

被引频次合计: 77

摘要: Permeability is an important hydraulic parameter for characterizing heat and mass transfer properties of fibrous porous media. However, it is difficult to be quantitatively predicted due to the complex and irregular pore structure of fibrous porous media. Fractal geometry has been verified to be an effective method for determining the permeability of fibrous porous media. In this study, recent works on the permeability of fibrous porous media by means of fractal geometry are reviewed, the advances for each presented fractal model are analyzed and summarized, parameter equations used in available fractal permeability models are also briefly compared and reviewed. Future work for more generalized permeability model of fibrous porous media need to conducted by considering the special characters of fibrous materials, uniform pore structure parameter model and the influence factor of capillary pressure, electrokinetic phenomena, etc.

入藏号: WOS:000351941700006

出版商: WORLD SCIENTIFIC PUBL CO PTE LTD

出版商地址: 5 TOH TUCK LINK, SINGAPORE 596224, SINGAPORE

Web of Science 类别: Mathematics, Interdisciplinary Applications; Multidisciplinary Sciences

ISSN: 0218-348X

eISSN: 1793-6543

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 282 条，共 381 条

标题: A genetic linkage between subduction- and collision-related porphyry Cu deposits in continental collision zones

作者: Hou, ZQ (Hou, Zengqian); Yang, ZM (Yang, Zhiming); Lu, YJ (Lu, Yongjun); Kemp, A (Kemp, Anthony); Zheng, YC (Zheng, Yuanchuan); Li, QY (Li, Qiuyun); Tang, JX (Tang, Juxing); Yang, ZS (Yang, Zhusen); Duan, LF (Duan, Lianfeng)

来源出版物: GEOLOGY 卷: 43 期: 3 页: 247-250 DOI: 10.1130/G36362.1 出版年: MAR 2015

Web of Science 核心合集中的 "被引频次": 181

被引频次合计: 223

摘要: The genesis of continental collision-related porphyry Cu deposits (PCDs) remains controversial. The most common hypothesis links their genesis with magmas derived from subduction-modified arc lithosphere. However, it is unclear whether a genetic linkage exists between collision-and subduction-related PCDs. Here, we studied Jurassic subduction-related Cu-Au and Miocene collision-related Cu-Mo porphyry deposits in south Tibet. The Jurassic PCDs occur only in the western segment of the Jurassic arc, which has depleted mantle-like isotopic compositions [e.g., (Sr-87/Sr-86)(i) = 0.7041-0.7048; epsilon(Nd(t)) as high as 7.5, and epsilon(Hf(t)) as high as 18]. By contrast, no Jurassic PCDs have been found in the eastern arc segment, which is isotopically less juvenile [e.g., (Sr-87/Sr-86)(i) = 0.7041-0.7063, epsilon(Nd(t)) < 4.5, and epsilon(Hf(t)) <= 12]. These results imply that incorporation of crustal components during underplating of Jurassic magma induced copper accumulation as sulfides at the base of the eastern Jurassic arc, inhibiting PCD formation at this time. Miocene PCDs are spatially confined to the Jurassic arc, and the giant Miocene PCDs cluster in its eastern segment where no Jurassic PCDs occur. This suggests that the arc segment barren for subduction-related PCDs could be fertile for collision-related PCDs. Miocene ore-forming porphyries have young Hf model ages and Sr-Nd-Hf isotopic compositions overlapping with those of the Jurassic rocks in the eastern segment, whereas contemporaneous barren porphyries outside the Jurassic arc have abundant zircon inheritance and crustlike Sr-Nd-Hf isotopic compositions. These data suggest that remelting of the lower crustal sulfide-bearing Cu-rich Jurassic cumulates, triggered by Cenozoic crustal thickening and/or subsequent slab break-off, led to the formation of giant Miocene PCDs. The spatial overlap and complementary metal endowment between subduction-and collision-related magmas may be used to evaluate the mineral potential for such deposits in other orogenic belts.

入藏号: WOS:000352096700016

出版商: GEOLOGICAL SOC AMER, INC

出版商地址: PO BOX 9140, BOULDER, CO 80301-9140 USA

Web of Science 类别: Geology

ISSN: 0091-7613

eISSN: 1943-2682

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 283 条，共 381 条

标题: Origin of the Jiaodong-type Xinli gold deposit, Jiaodong Peninsula, China: Constraints from fluid inclusion and C-D-O-S-Sr isotope compositions

作者: Deng, J (Deng, Jun); Liu, XF (Liu, Xuefei); Wang, QF (Wang, Qingfei); Pan, RG (Pan, Ruiguang)

来源出版物: ORE GEOLOGY REVIEWS 卷: 65 特刊: SI 页: 674-686 DOI: 10.1016/j.oregeorev.2014.04.018 子辑: 3 出版年: MAR 2015

Web of Science 核心合集中的 "被引频次": 114

被引频次合计: 127

摘要: The Xinli gold deposit within the Sanshandao-Cangshang gold belt in the Jiaodong gold province is a typical "Jiaojia type" ore deposit, with high-grade, quartz-sulfide vein/veinlet stockworks that cut Mesozoic granodiorite. Four ore stages are distinguished in the following sequences: I) quartz-K-feldspar-sericite-pyrite; II) quartz-pyrite; III) quartz-polymetallic sulfide; and IV) quartz-calcite-pyrite. Fluid inclusions in quartz and calcite in the ores contain C-O-H fluids dominantly of six types with varied liquid/vapor ratio. Ore fluid in the main ore stage is characterized by medium-low temperature, low salinity, reducing condition, and NaCl-H2O-CO2 CH4 in composition. The delta O-18(water) (parts per thousand)SMOW of quartz in ore stages II and III range from 2.82 to 5.34%., and the delta D (parts per thousand)smow are between -69.6 and 88.3%o. Both suggest that the ore fluid was dominantly magmatic water. The delta C-13(PDB) of the calcite are from -6.4 parts per thousand to -2.4 cent, indicating mantle contribution to the ore fluid. The pyrite delta S-34(CDT) from four ore stages are basically similar varying from 9.42 to 11.62 parts per thousand, which implies significant involvement of crustal materials. The initial Sr-87/Sr-88 ratios in the calcite ranging from 0.710657 to 0.711542 also denote a crustal contribution. The fluid composition and systematic H-O-C-S-Sr isotopic data are explained by a model of slab-subduction induced gold mineralization. In the model, the ore fluid and metals were considered to associate with the dehydration and desulfidation of the subducting paleo-Pacific slab and the subsequent devolatilization of enriched mantle wedge. The H2O in the fluid might have been released from the devolatilization of enriched mantle wedge; the CO2 could be from mantle wedge or subcontinental lithospheric mantle; and the sulfur and strontium would be initially released from the subducted seafloor sediments. This process was further supported by the geochemical features of intermediate-basic dykes contemporaneous to the gold ore deposits. The deposit features and ore-forming process of the Xinli gold deposit hardly concur those of the orogenic gold deposit and the pluton-related gold deposit. The study supports the argument of that the gold deposits in the Jiaodong belong to a unique gold type related to a complex slab subduction-related process. The geodynamic engine of the Jiaodongtype gold deposit is specific, i.e., the slab subduction coupling with the consequent lithospheric thinning and structure adjustment. (C) 2014 Elsevier B.V. All rights reserved.

入藏号: WOS:000348017600009

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geology; Mineralogy; Mining & Mineral Processing

ISSN: 0169-1368

eISSN: 1872-7360

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 284 条，共 381 条

标题: Hidden Attractors and Dynamical Behaviors in an Extended Rikitake System

作者: Wei, ZC (Wei, Zhouchao); Zhang, W (Zhang, Wei); Wang, Z (Wang, Zhen); Yao, MH (Yao, Minghui)

来源出版物: INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS 卷: 25 期: 2 文献号: 1550028 DOI: 10.1142/S0218127415500285 出版年: FEB 2015

Web of Science 核心合集中的 "被引频次": 71

被引频次合计: 72

摘要: In this paper, an extended Rikitake system is studied. Several issues, such as Hopf bifurcation, coexistence of stable equilibria and hidden attractor, and dynamics analysis at infinity are investigated either analytically or numerically. Especially, by a simple linear transformation, the wide range of hidden attractors is noticed, and the Lyapunov exponents diagram is given. The obtained results show that the unstable periodic solution generated by Hopf bifurcation leads to the hidden attractor. The existence of hidden attractors that may render the system's behavior unpredictable not only depends on the value of system parameters but also on the value of initial conditions. The phenomena are important and potentially problematic in engineering applications.

入藏号: WOS:000350485800014

出版商: WORLD SCIENTIFIC PUBL CO PTE LTD

出版商地址: 5 TOH TUCK LINK, SINGAPORE 596224, SINGAPORE

Web of Science 类别: Mathematics, Interdisciplinary Applications; Multidisciplinary Sciences

ISSN: 0218-1274

eISSN: 1793-6551

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 285 条，共 381 条

标题: Fabrication of Multiple Heterojunctions with Tunable Visible-Light-Active Photocatalytic Reactivity in BiOBr-BiOl Full-Range Composites Based on Microstructure Modulation and Band Structures

作者: Huang, HW (Huang, Hongwei); Han, X (Han, Xu); Li, XW (Li, Xiaowei); Wang, SC (Wang, Shichao); Chu, PK (Chu, Paul K.); Zhang, YH (Zhang, Yihe)

来源出版物: ACS APPLIED MATERIALS & INTERFACES 卷: 7 期: 1 页: 482-492 DOI: 10.1021/am5065409 出版年: JAN 14 2015

Web of Science 核心合集中的 "被引频次": 524

被引频次合计: 526

入藏号: WOS:000348085200059

PubMed ID: 25525911

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Nanoscience & Nanotechnology; Materials Science, Multidisciplinary

ISSN: 1944-8244

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 286 条，共 381 条

标题: Recent progress in luminescence tuning of Ce3+ and Eu2+-activated phosphors for pc-WLEDs

作者: Li, GG (Li, Guogang); Tian, Y (Tian, Ying); Zhao, Y (Zhao, Yun); Lin, J (Lin, Jun)

来源出版物: CHEMICAL SOCIETY REVIEWS 卷: 44 期: 23 页: 8688-8713 DOI: 10.1039/c4cs00446a 出版年: 2015

Web of Science 核心合集中的 "被引频次": 430

被引频次合计: 435

摘要: Nowadays, phosphor converted white light-emitting diodes (pc-WLEDs) have been widely used in solid-state lighting and display areas due to their superior lifetime, efficiency, and reliability as well as significant reduction in power consumption. Phosphors are indispensable components of pc-WLED devices, and their luminescence properties determine the quality of WLED lighting and displays. In order to further achieve high luminous efficacy, chromatic stability, and color-rending properties in pc-WLEDs, much effort has been focused on improving current pc-WLED phosphors and developing novel pc-WLED phosphors recently. This review article concerns commonly used rare earth ion (Eu2+ and Ce3+) activated inorganic phosphors, highlighting the important effect of spectral tuning via local structural variations on improving the luminescence performance of phosphors. The main spectral tuning strategies are discussed in detail and summarized, including (1) doping level control; (2) cationic substitution; (3) anionic substitution; (4) cationic-anionic substitution; (5) the crystal-site engineering approach; (6) mixing of nanophases.

入藏号: WOS:000364853400012

PubMed ID: 26421319

出版商: ROYAL SOC CHEMISTRY

出版商地址: THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS, ENGLAND

Web of Science 类别: Chemistry, Multidisciplinary

ISSN: 0306-0012

eISSN: 1460-4744

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 287 条，共 381 条

标题: Mediator-free direct Z-scheme photocatalytic system: BiVO4/g-C3N4 organic-inorganic hybrid photocatalyst with highly efficient visible-light-induced photocatalytic activity

作者: Tian, N (Tian, Na); Huang, HW (Huang, Hongwei); He, Y (He, Ying); Guo, YX (Guo, Yuxi); Zhang, TR (Zhang, Tierui); Zhang, YH (Zhang, Yihe)

来源出版物: DALTON TRANSACTIONS 卷: 44 期: 9 页: 4297-4307 DOI: 10.1039/c4dt03905j 出版年: 2015

Web of Science 核心合集中的 "被引频次": 215

被引频次合计: 219

摘要: We disclose the fabrication of a mediator-free direct Z-scheme photocatalyst system BiVO4/g-C3N4 using a mixed-calcination method based on the more reliable interfacial interaction. The facet coupling occurred between the g-C3N4 (002) and BiVO4 (121), and it was revealed by X-ray diffraction (XRD), X-ray photoelectron spectroscopy (XPS) and transmission electron microscope (TEM). The crystal structure and optical properties of the as-prepared samples have also been characterized by Fourier-transform infrared (FTIR), scanning electron microscopy (SEM) and UV-vis diffuse reflectance spectra (DRS) in details. The photocatalytic experiments indicated that the BiVO4/g-C3N4 composite photocatalysts display a significantly enhanced photocatalytic activity pertaining to RhB degradation and photocurrent generation (PC) compared to the pristine BiVO4 and g-C3N4. This remarkably improved photocatalytic performance should be attributed to the fabrication of a direct Z-scheme system of BiVO4/g-C3N4, which can result in a more efficient separation of photoinduced charge carriers than band-band transfer, thus endowing it with the much more powerful oxidation and reduction capability, as confirmed by the photoluminescence (PL) spectra and electrochemical impedance spectra (EIS). The Z-scheme mechanism of BiVO4/g-C3N4 heterostructure was verified by a series of combined techniques, including the active species trapping experiments, NBT transformation and terephthalic acid photoluminescence probing technique (TA-PL) over BiVO4/g-C3N4 composites and the pristine samples. The present work not only furthered the understanding of mediator-free Z-scheme photocatalysis, but also shed new light on the design of heterostructural photocatalysts with high-performance.

入藏号: WOS:000349993400046

PubMed ID: 25635354

出版商: ROYAL SOC CHEMISTRY

出版商地址: THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS, ENGLAND

Web of Science 类别: Chemistry, Inorganic & Nuclear

ISSN: 1477-9226

eISSN: 1477-9234

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 288 条，共 381 条

标题: Compositional polarity of Triassic granitoids in the Qinling Orogen, China: Implication for termination of the northernmost paleo-Tethys

作者: Li, N (Li, Nuo); Chen, YJ (Chen, Yan-Jing); Santosh, M (Santosh, M.); Pirajno, F (Pirajno, Franco)

来源出版物: GONDWANA RESEARCH 卷: 27 期: 1 页: 244-257 DOI: 10.1016/j.gr.2013.09.017 出版年: JAN 2015

Web of Science 核心合集中的 "被引频次": 141

被引频次合计: 160

摘要: The Qinling Orogen was formed from the closure of the northernmost paleo-Tethys sea and the tectonic suturing of the Yangtze and North China Cratons. The timing of this collision and the tectonic framework are debated. The widely developed Triassic granitoids in the western Qinling Orogen offer a key to understand the tectonic evolution of this region. Here we compile the geological, geochemical and geochronological data of the Triassic granitoids from the Qingling Orogen and conclude that the granitoids north of the Mian-Lue Suture were emplaced in an active continental margin related to the northward subduction of the Mian-Lue oceanic plate during 248 - 200 Ma. The granitoids can be classified into I- and S-types, with the former constituting the major variety. Northward from the Mian-Lue Fault, an S-type granite belt appears, followed by and locally overlapping with an I-type granite belt. The I-type granite belt can be subdivided into four sub-belts from south to north, with increasing contents of K2O, K2O + Na2O, SiO2, Th and U, and the ratios of K2O/Na2O, Rb/Sr and (Sr-87/Sr-86)(i), but decreasing contents of Na2O, Al2O3, Mg#, and epsilon Hf(t), except for the northernmost belt which occurs in the Huaxiong Block of the North China Craton. This geochemical polarity of I-type granitoids and the zoned distribution of S- and I-types granitoids cannot be explained through continental collision orogeny (including syn- to post-collision), but can be well interpreted by considering the progressive subduction of the northernmost branch of the paleo-Tethys, as represented by the Mian-Lue Ocean. Thus, the termination of the northernmost paleo-Tethys and the onset of the continental collision between the Yangtze and the North China plates are considered to have occurred at about 200 Ma, during the transition from Triassic to Jurassic. Our model is also supported by the available data from other studies and provides a revised framework for the timing and tectonics of assembly of the Yangtze and the North China Cratons. (C) 2013 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000345805800011

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 289 条，共 381 条

标题: Bi2O2(OH)(NO3) as a desirable [Bi2O2](2+) layered photocatalyst: strong intrinsic polarity, rational band structure and {001} active facets co-beneficial for robust photooxidation capability

作者: Huang, HW (Huang, Hongwei); He, Y (He, Ying); Li, XW (Li, Xiaowei); Li, M (Li, Min); Zeng, C (Zeng, Chao); Dong, F (Dong, Fan); Du, X (Du, Xin); Zhang, TR (Zhang, Tierui); Zhang, YH (Zhang, Yihe)

来源出版物: JOURNAL OF MATERIALS CHEMISTRY A 卷: 3 期: 48 页: 24547-24556 DOI: 10.1039/c5ta07655b 出版年: 2015

Web of Science 核心合集中的 "被引频次": 269

被引频次合计: 270

摘要: Developing high-performance photocatalytic materials is of huge significance and highly desirable for fulfilling the pressing need in environmental remediation. In this work, we demonstrate the use of bismuth nitrate Bi2O2(OH)(NO3) as an absorbing photocatalyst, which integrates multiple superiorities, like a [Bi2O2](2+) layered configuration, a non-centrosymmetric (NCS) polar structure and highly reactive {001} facets. Bi2O2(OH)(NO3) nanosheets are obtained by a facile one-pot hydrothermal route using Bi(NO3)(3)center dot 5H(2)O as the sole raw material. Photocatalysis assessment revealed that Bi2O2(OH)(NO3) holds an unprecedented photooxidation ability in contaminant decomposition, far out-performing the well-known photocatalysts BiPO4, Bi2O2CO3, BiOCl and P25 (commercial TiO2). Particularly, it displays a universally powerful catalytic activity against various stubborn industrial contaminants and pharmaceuticals, including phenol, bisphenol A, 2,4-dichlorophenol and tetracycline hydrochloride. In-depth experimental and density functional theory (DFT) investigations co-uncovered that the manifold advantages, such as large polarizability and rational band structure, as well as exposed {001} active facets, induced robust generation of strong oxidating superoxide radicals (center dot O-2(-)) in the conduction band and hydroxyl radicals ((OH)-O-center dot) in the valence band, thus enabling Bi2O2(OH)(NO3) to have a powerful and durable photooxidation capability. Bi2O2(OH)(NO3) also presents high photochemical stability. This work not only rendered a highly active and stable photocatalyst for practical applications, but also laid a solid foundation for future initiatives aimed at designing new photoelectronic materials by manipulating multiple advantageous factors.

入藏号: WOS:000366163000044

出版商: ROYAL SOC CHEMISTRY

出版商地址: THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS, ENGLAND

Web of Science 类别: Chemistry, Physical; Energy & Fuels; Materials Science, Multidisciplinary

ISSN: 2050-7488

eISSN: 2050-7496

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 290 条，共 381 条

标题: Mesoporous, hierarchical core/shell structured ZnCo2O4/MnO2 nanocone forests for high-performance supercapacitors

作者: Qiu, KW (Qiu, Kangwen); Lu, Y (Lu, Yang); Zhang, DY (Zhang, Deyang); Cheng, JB (Cheng, Jinbing); Yan, L (Yan, Long); Xu, JY (Xu, Jinyou); Liu, XM (Liu, Xianming); Kim, JK (Kim, Jang-Kyo); Luo, YS (Luo, Yongsong)

来源出版物: NANO ENERGY 卷: 11 页: 687-696 DOI: 10.1016/j.nanoen.2014.11.063 出版年: JAN 2015

Web of Science 核心合集中的 "被引频次": 219

被引频次合计: 220

摘要: ZnCo2O4/MnO2 nanocone forests with a mesoporous, hierarchical core-shell structure and a large surface area were hydrothermally grown on 3D nickel foam. The supercapacitor electrodes prepared from the unique structure exhibits exceptional specific capacitances of 2339 and 1526 F g(-1) at current densities of 1 and 10 A g(-1), respectively, and long-term capacity retention of similar to 95.9% after 3000 cycles at 2 A and 94.5% after 8000 cycles at 10 A g(-1). These values are proven to be the highest when the capacitances are compared between the current study and similar core/shell-structured metal oxide electrodes taken from the literature. Many synergistic effects are identified to be responsible for the observations: namely, highly conductive 3D Ni foam substrate that totally eliminate binders and conductive additives; high crystalline quality of the ZnCo2O4 core which is directly grown on the conductive current collector, allowing fast electron transport; and the mesoporous MnO2 shell with a huge surface area for fast ion diffusion and intimate electrode/electrolyte contact. In addition, the nanostructured core and shell have redox reactions with anions and cations from the electrolyte, respectively, both of which contribute much to electrochemical charge storage. (C) 2014 Elsevier Ltd. All rights reserved.

入藏号: WOS:000351194300072

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary; Physics, Applied

ISSN: 2211-2855

eISSN: 2211-3282

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 291 条，共 381 条

标题: An exotic Mesoarchean microcontinent: The Coorg Block, southern India

作者: Santosh, M (Santosh, M.); Yang, QY (Yang, Qiong-Yan); Shaji, E (Shaji, E.); Tsunogae, T (Tsunogae, T.); Mohan, MR (Mohan, M. Ram); Satyanarayanan, M (Satyanarayanan, M.)

来源出版物: GONDWANA RESEARCH 卷: 27 期: 1 页: 165-195 DOI: 10.1016/j.gr.2013.10.005 出版年: JAN 2015

Web of Science 核心合集中的 "被引频次": 124

被引频次合计: 126

摘要: Sandwiched between the Dharwar Craton in the north and the Neoarchean-Proterozoic crustal blocks to the south, the Coorg Block in southern India is composed dominantly of a suite of arc magmatic rocks including charnockites, TTG (tonalite-trondhjemite-granodiorite)-related granitoid suite and felsic volcanic tuffs together with minor accreted oceanic remnants along the periphery of the block. Coeval mafic and felsic magmatism with magma mixing and mingling in an arc setting is well represented in the block. Here we present the petrology, geochemistry, zircon U-Pb geochronology and Lu-Hf isotopes of all the major lithologies from this block. Computation of metamorphic P-T conditions from mineral chemical data shows consistent granulite-facies P-T conditions of 820-870 degrees C and up to 6 kbar. Our geochemical data from major, trace and REE on representative samples of the dominant rock types from the Coorg Block corroborate an arc-related signature, with magma generation in a convergent margin setting. The zircon data yield weighted mean (207)pb/Pb-206 ages of 3153.4 +/- 9 to 3184.0 +/- 55 Ma for syenogranites, 31703 +/- 6.8 Ma for biotite granite, 3275 +/- 5.1 Ma for trondhjemite, 3133 +/- 12 to 3163.8 +/- 6.9 Ma for chamockites, 3156 +/- 10 to 3158.3 +/- 82 for mafic enclaves, 3161 +/- 16 Ma for diorite and 3173 16 Ma for felsic volcanic tuff. An upper intercept age of 3363 +/- 59 Ma and a lower intercept age of 2896 +/- 130 Ma on zircons from a charnockite, as well as an evaluation of the Th/U values of the zircon domains against respective Pb-207/Pb-206 ages suggest that the Mesoarchean magma emplacement which probably ranged from >33 to 3.1 Ga was immediately followed by metamorphism at ca. 3.0 to 2.9 Ga. The ages of magmatic zircons from the chamockites and their mafic granulite enclaves, as well as those from the volcanic tuff and biotite granite, are all remarkably consistent and concordant marking ca. 3.1 Ga as the peak of subduction-related crust building in this block, within the tectonic milieu of an active convergent margin. The majority of zircons from the Coorg rocks show Hf isotope features typical of crystallization from magmas derived from juvenile sources. Their Hf crustal model ages suggest that the crust building might have also involved partial recycling of basement rocks as old as ca. 3.8 Ga. The crustal blocks in the Southern Granulite Terrane in India preserve strong imprints of major tectonothermal events at 25 Ga, 2.0 Ga, 0.8 Ga and 0.55 Ga associated with various subduction-accretion-collision or rifting events. However, the Coorg Block is exceptional with our data suggesting that none of the above events affected this block. Importantly, there is also no record in the Coorg Block for the 2.5 Ga pervasive regional metamorphism that affected all the other blocks in this region. The geochronological data raise the intriguing possibility that this block is an exotic entity within the dominantly Neoarchean collage in the northern domain of the Southern Granulite Terrane of India. The Mesoarchean arc-related rocks in the Coorg Block suggest that the magma factories and their tectonic architecture in the Early Earth were not markedly different from those associated with the modern-style plate tectonics. (C) 2013 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000345805800006

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 292 条，共 381 条

标题: Ages and magnetic structures of the South China Sea constrained by deep tow magnetic surveys and IODP Expedition 349

作者: Li, CF (Li, Chun-Feng); Xu, X (Xu, Xing); Lin, J (Lin, Jian); Sun, Z (Sun, Zhen); Zhu, J (Zhu, Jian); Yao, YJ (Yao, Yongjian); Zhao, XX (Zhao, Xixi); Liu, QS (Liu, Qingsong); Kulhanek, DK (Kulhanek, Denise K.); Wang, J (Wang, Jian); Song, TR (Song, Taoran); Zhao, JF (Zhao, Junfeng); Qiu, N (Qiu, Ning); Guan, YX (Guan, Yongxian); Zhou, ZY (Zhou, Zhiyuan); Williams, T (Williams, Trevor); Bao, R (Bao, Rui); Briais, A (Briais, Anne); Brown, EA (Brown, Elizabeth A.); Chen, YF (Chen, Yifeng); Clift, PD (Clift, Peter D.); Colwell, FS (Colwell, Frederick S.); Dadd, KA (Dadd, Kelsie A.); Ding, WW (Ding, Weiwei); Almeida, IH (Almeida, Ivan Hernandez); Huang, XL (Huang, Xiao-Long); Hyun, SM (Hyun, Sangmin); Jiang, T (Jiang, Tao); Koppers, AAP (Koppers, Anthony A. P.); Li, QY (Li, Qianyu); Liu, CL (Liu, Chuanlian); Liu, ZF (Liu, Zhifei); Nagai, RH (Nagai, Renata H.); Peleo-Alampay, A (Peleo-Alampay, Alyssa); Su, X (Su, Xin); Tejada, MLG (Tejada, Maria Luisa G.); Trinh, HS (Hai Son Trinh); Yeh, YC (Yeh, Yi-Ching); Zhang, CL (Zhang, Chuanlun); Zhang, F (Zhang, Fan); Zhang, GL (Zhang, Guo-Liang)

来源出版物: GEOCHEMISTRY GEOPHYSICS GEOSYSTEMS 卷: 15 期: 12 页: 4958-4983 DOI: 10.1002/2014GC005567 出版年: DEC 2014

Web of Science 核心合集中的 "被引频次": 209

被引频次合计: 260

摘要: Combined analyses of deep tow magnetic anomalies and International Ocean Discovery Program Expedition 349 cores show that initial seafloor spreading started around 33 Ma in the northeastern South China Sea (SCS), but varied slightly by 1-2 Myr along the northern continent-ocean boundary (COB). A southward ridge jump of approximate to 20 km occurred around 23.6 Ma in the East Subbasin; this timing also slightly varied along the ridge and was coeval to the onset of seafloor spreading in the Southwest Subbasin, which propagated for about 400 km southwestward from approximate to 23.6 to approximate to 21.5 Ma. The terminal age of seafloor spreading is approximate to 15 Ma in the East Subbasin and approximate to 16 Ma in the Southwest Subbasin. The full spreading rate in the East Subbasin varied largely from approximate to 20 to approximate to 80 km/Myr, but mostly decreased with time except for the period between approximate to 26.0 Ma and the ridge jump (approximate to 23.6 Ma), within which the rate was the fastest at approximate to 70 km/Myr on average. The spreading rates are not correlated, in most cases, to magnetic anomaly amplitudes that reflect basement magnetization contrasts. Shipboard magnetic measurements reveal at least one magnetic reversal in the top 100 m of basaltic layers, in addition to large vertical intensity variations. These complexities are caused by late-stage lava flows that are magnetized in a different polarity from the primary basaltic layer emplaced during the main phase of crustal accretion. Deep tow magnetic modeling also reveals this smearing in basement magnetizations by incorporating a contamination coefficient of 0.5, which partly alleviates the problem of assuming a magnetic blocking model of constant thickness and uniform magnetization. The primary contribution to magnetic anomalies of the SCS is not in the top 100 m of the igneous basement.

入藏号: WOS:000348061300021

出版商: AMER GEOPHYSICAL UNION

出版商地址: 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Web of Science 类别: Geochemistry & Geophysics

eISSN: 1525-2027

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 293 条，共 381 条

标题: On the existence of blow up solutions for a class of fractional differential equations

作者: Bai, ZB (Bai, Zhanbing); Chen, YQ (Chen, YangQuan); Lian, HR (Lian, Hairong); Sun, SJ (Sun, Sujing)

来源出版物: FRACTIONAL CALCULUS AND APPLIED ANALYSIS 卷: 17 期: 4 页: 1175-1187 DOI: 10.2478/s13540-014-0220-2 出版年: DEC 2014

Web of Science 核心合集中的 "被引频次": 53

被引频次合计: 54

摘要: In this paper, by using fixed-point theorems, and lower and upper solution method, the existence for a class of fractional initial value problem (FIVP) is discussed, where f a C([0, h]xR,R), D (0+) (alpha) u(t) is the standard Riemann-Liouville fractional derivative, 1 < alpha < 2. Some hidden confusion and fallacy in the literature are commented. A new condition on the nonlinear term is given to guarantee the equivalence between the solution of the FIVP and the fixed-point of the operator. Based on the new condition, some new existence results are obtained and presented as example.

入藏号: WOS:000341700000015

出版商: DE GRUYTER OPEN LTD

出版商地址: SOLIPSKA 14A-1, 02-482 WARSAW, POLAND

Web of Science 类别: Mathematics, Applied; Mathematics, Interdisciplinary Applications; Mathematics

ISSN: 1311-0454

eISSN: 1314-2224

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 294 条，共 381 条

标题: Cenozoic tectono-magmatic and metallogenic processes in the Sanjiang region, southwestern China

作者: Deng, J (Deng, Jun); Wang, QF (Wang, Qingfei); Li, GJ (Li, Gongjian); Santosh, M (Santosh, M.)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 138 页: 268-299 DOI: 10.1016/j.earscirev.2014.05.015 出版年: NOV 2014

Web of Science 核心合集中的 "被引频次": 366

被引频次合计: 417

摘要: The Sanjiang region in SE Tibet Plateau, and the western Yunnan region in southwestern China constitute a collage of Gondwana-derived micro-continental blocks and arc terranes that were accreted together after the closure of the Paleotethys Oceans in Permo-Triassic. The lithospheric structure in Sanjiang prior to the Cenozoic was dominantly characterized by sub-parallel sutures, subduction-modified mantle and crust, Mesozoic basins between the sutures, and primary polymetallic accumulations. During the Cenozoic, intense deformation, episodic magmatism, and diverse mineralization occurred, jointly controlled by the underthrust of South China litho-sphere and the subduction of Pacific plate to the east, the India-Eurasia continental collision and the subduction of Indian oceanic plate to the west. In this paper, we identify the following four main phases for the Cenozoic evolution in the Sanjiang region. (i) Subduction and rollback of Neotethyan oceanic plate before ca. 45-40 Ma caused lithosphere shortening, indicated by folding-thrusting in the shallow crust and horizontal shearing in middle crust, and multiple magmatic activities, with associated formation of Sn ore deposits in the Tengchong block, Cu polymetallic ore deposits within Mesozoic basins, and Mo and Pb-Zn ore deposits in the Cangyuan area nearby the Changning-Menglian suture. (ii) Breakoff of Neotethyan slab in 45-40 Ma in combination with the India-Eurasia continental hard collision caused the diachronous removal of the lower lithospheric mantle during 42-32 Ma, with the resultant potassic-ultrapotassic magmatism and formation of the related porphyry-skarn ore deposits along the Jinshajiang-Ailaoshan suture. (iii) Underthrusting of the South China plate resulting in the kinking of Sanjiang, expressed by block rotation, extrusion, and shearing in the southern Sanjiang during 32-10 Ma, with contemporary formation of the orogenic gold deposit along shear zones and the MVT Pb-Zn ore deposits within Mesozoic basins. (iv) Subduction of Indian oceanic plate possibly together with the Ninety East Ridge caused the local extension and volcanism in western Sanjiang, and the interplay between India-Eurasia collision and the Pacific plate subduction induced tensile stress and mantle perturbation in eastern Sanjiang from ca. 10 Ma to present. The Cenozoic tectonic process traces a continuum of lithosphere shortening, sub-lithosphere mantle removal, and lithosphere underthrusting. During the lithospheric mantle removal, the simultaneous melting of the metasomatized lithospheric mantle and juvenile lower crust with possible metal enrichment contributed to the formation of potassic-ultrapotassic intrusive rocks and related porphyry-skarn mineralization. It is proposed that the kinking in the Sanjiang region was controlled by the non-coaxial compressions of the South China block and India continent, which are much larger in size than the blocks in Sanjiang. The underthrust continental lithosphere of the South China block caused the formation of orogenic gold deposits due to the release of metamorphic fluids from the front of the underthrust zone and the development of MVT Pb-Zn deposits via fluid circulation in the farther metal-enriched Mesozoic basins. Our study reveals that the pre-Cenozoic lithospheric structure in Sanjiang played an important role in the styles of tectonic movement, the nature and spatial distribution of magmatism, and the large-scale metallogeny during the Cenozoic. (C) 2014 Elsevier B.V. All rights reserved.

入藏号: WOS:000345058600013

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 295 条，共 381 条

标题: Hidden Hyperchaotic Attractors in a Modified Lorenz-Stenflo System with Only One Stable Equilibrium

作者: Wei, ZC (Wei, Zhouchao); Zhang, W (Zhang, Wei)

来源出版物: INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS 卷: 24 期: 10 文献号: 1450127 DOI: 10.1142/S0218127414501272 出版年: OCT 2014

Web of Science 核心合集中的 "被引频次": 103

被引频次合计: 104

摘要: This paper reports the finding of a four-dimensional (4D) non-Sil'nikov autonomous system with three quadratic nonlinearities, which exhibits some behavior previously unobserved: hidden hyperchaotic attractors with only one stable equilibrium. The algebraical form of the non-Sil'nikov chaotic attractor is very similar to the hyperchaotic Lorenz-Stenflo system but they are different and, in fact, nonequivalent in topological structures. Of particular interest is the fact this system has only one stable equilibrium, but can exhibit hidden hyperchaos, chaos, periodic orbit. Moreover, the coexistence of attracting sets can be obtained in the system for some parameter values and different initial conditions, such as hyperchaotic attractor and point, hyperchaotic attractor and period orbit. To further analyze the new system, the ultimate bound and positively invariant set for the modified hyperchaotic Lorenz-Stenflo system are also obtained. Moreover, the complete mathematical characterizations for 4D Hopf bifurcation are rigorously derived and studied.

入藏号: WOS:000344456700011

出版商: WORLD SCIENTIFIC PUBL CO PTE LTD

出版商地址: 5 TOH TUCK LINK, SINGAPORE 596224, SINGAPORE

Web of Science 类别: Mathematics, Interdisciplinary Applications; Multidisciplinary Sciences

ISSN: 0218-1274

eISSN: 1793-6551

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 296 条，共 381 条

标题: Tethys tectonic evolution and its bearing on the distribution of important mineral deposits in the Sanjiang region, SW China

作者: Deng, J (Deng, Jun); Wang, QF (Wang, Qingfei); Li, GJ (Li, Gongjian); Li, CS (Li, Chusi); Wang, CM (Wang, Changming)

来源出版物: GONDWANA RESEARCH 卷: 26 期: 2 特刊: SI 页: 419-437 DOI: 10.1016/j.gr.2013.08.002 出版年: SEP 2014

Web of Science 核心合集中的 "被引频次": 356

被引频次合计: 423

摘要: The Sanjiang region in SE Tibet Plateau and NW Yunnan is known to have formed by amalgamation of Gondwana-derived continental blocks and arc terranes as a result of oceanic subduction followed by continental collision from Paleozoic to Mesozoic. In this paper we provide a synthesis of tectonic evolution, magmatism and metallogeny in the region based on data from literatures. Early Paleozoic ophiolites (473-439 Ma) in the Changning-Menglian belt indicate the existence of a Proto-Tethys ocean in this region. Two episodes of subduction-related magmatism in the early-Paleozoic, one occurred in the Baoshan and Tengchong blocks at 502-455 Ma and the other occurred in the Simao block at 421-401 Ma, are regarded as evidence for two different events of subduction of the Proto-Tethys ocean at different locations. The Proto-Tethys was succeeded in early-Devonian by the Paleo-Tethys which comprised the main ocean and three branches: Ailaoshan, Jinshajiang and Garze-Litang. The Changning-Menglian main ocean existed from middle-Devonian to middle-Triassic. The remnants of the oceanic crust are preserved in a few places in the Longmu Tso-Shuanghu suture as well as in the Changning-Menglian ophiolite belt. The eastward subduction of the main oceanic plate from early-Permian to early-Triassic formed a prominent arc terrane stretching > 1500 km from Yunnan to eastern Tibet. From the waning stage of subduction to post-subduction, numerous S-type granite plutons with ages varying between 230 and 219 Ma, such as the Lincang batholith in Yunnan were emplaced at or close to the suture. This event produced several hydrothermal W-Sn deposits in the region. The tectonic evolution and associated magmatism of the Jinshajiang and Ailaoshan branch oceans are generally comparable to those of the main ocean. However, the branch oceans were subducted westward instead. The Garze-Litang branch ocean also underwent westward subduction from middle-Devonian to late-Triassic. Arc-related high Sr/Y porphyry intrusions and associated porphyry-skarn Cu-Mo-Au deposits are common in the Jinshajiang-Ailaoshan region, especially in the Yidun arc which formed prior to Jurassic. The VMS deposits in the Sanjiang region formed in diverse tectonic settings including middle-Silurian back-arc basins, Carboniferous oceanic islands, Paleozoic subduction zones and Triassic post-subduction rifting environments. The Mesozoic and early-Cenozoic evolution of the Baoshan and Tengchong blocks was largely influenced by eastward oceanic subduction of the Meso- and Neo-Tethys from late-Permian to middle-Cretaceous and from late-Cretaceous to similar to 50 Ma, respectively. Abundant early-Cretaceous granitoids and associated skarn-type Pb-Zn and Sn-Fe deposits in the Baoshan and Tengchong blocks were produced in the background of the Shan boundary oceanic slab subduction to the west and the break-off of the Nujiang-Bitu oceanic slab to the north. The subduction of the Neo-Tethys oceanic plate beneath the Tengchong block from Late Cretaceous to Paleogene formed abundant S-type granitoids and many skarn-type and greisen-type Sn-W deposits. Granitoids formed at 105 to 81 Ma and contemporaneous hydrothermal W, Mo, Ag and Au deposits, which temporally coincided with the subduction of the Neo-Tethys, are common in the Yidun arc terrane. (C) 2013 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000339037800002

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 297 条，共 381 条

标题: The boundary between the Simao and Yangtze blocks and their locations in Gondwana and Rodinia: Constraints from detrital and inherited zircons

作者: Wang, QF (Wang, Qingfei); Deng, J (Deng, Jun); Li, CS (Li, Chusi); Li, GJ (Li, Gongjian); Yu, L (Yu, Li); Qiao, L (Qiao, Long)

来源出版物: GONDWANA RESEARCH 卷: 26 期: 2 特刊: SI 页: 438-448 DOI: 10.1016/j.gr.2013.10.002 出版年: SEP 2014

Web of Science 核心合集中的 "被引频次": 139

被引频次合计: 146

摘要: The Simao block, which is the northern extension of the Indochina block, and the Yangtze block were amalgamated by the closure of a Paleo-Tethys branch ocean commonly referred to as the Ailaoshan ocean. The exact location of the suture between these two continental blocks has been contested. Some researchers believed that it is located within the Cenozoic Ailaoshan shear zone whereas other researchers thought that it is present > 50 km farther to the west. The detrital and inherited-xenocrystic zircons from Paleozoic sedimentary rocks and a Triassic granite dyke respectively in the Laowangzhai-Mojiang suspect terrane, which occurs between the two suggested locations for the same suture, show that neither of these previously suggested locations is accurate. The age distribution pattern of detrital and inherited-xenocrystic zircons from the Laowangzhai-Mojiang suspect terrane is similar to that of detrital zircons from the Simao-Indochina block but different from that of those from the Jianshui area in the western margin of the Yangtze block. This indicates that the Laowangzhai-Mojiang suspect terrane belongs to the Simao-Indochina block. The actual location of the suture between the Simao-Indochina and Yangtze blocks is suggested to superimpose the Ailaoshan late-Devonian to early-Carboniferous ophiolite belt within the suspect terrane. The new interpretation is also supported by Hf isotopes of detrital zircons from the related continental blocks. The age distribution pattern of Precambrian detrital zircons from the western part of the Yangtze block is different from that of those from Australia or Tethyan Himalaya (the northern part of the Indian continent), indicating that the Yangtze block was not an integral part of Australia or India in Rodinia. The age distribution pattern of pre-Carboniferous detrital zircons from the Simao-Indochina block is remarkably similar to that of those from the Tethyan Himalaya, indicating that the Simao-Indochina block was derived from Indian Gondwana. (C) 2013 International Association for Gondwana Research. Published by Elsevier B.V. All tights reserved.

入藏号: WOS:000339037800003

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 298 条，共 381 条

标题: Shale gas potential of the major marine shale formations in the Upper Yangtze Platform, South China, Part II: Methane sorption capacity

作者: Tan, JQ (Tan, Jingqiang); Weniger, P (Weniger, Philipp); Krooss, B (Krooss, Bernhard); Merkel, A (Merkel, Alexej); Horsfield, B (Horsfield, Brian); Zhang, JC (Zhang, Jinchuan); Boreham, CJ (Boreham, Christopher J.); van Graas, G (van Graas, Ger); Tocher, BA (Tocher, Bruce Alastair)

来源出版物: FUEL 卷: 129 页: 204-218 DOI: 10.1016/j.fuel.2014.03.064 出版年: AUG 1 2014

Web of Science 核心合集中的 "被引频次": 187

被引频次合计: 204

摘要: The marine black shale formations on the Upper Yangtze Platform (UYP), South China are exploration targets for shale gas. Here, we report on the methane sorption capacity of thermally overmature samples from the Lower Silurian and Lower Cambrian black shale intervals in the UYP (UYP-samples). Two immature shale samples from the Middle Cambrian formation in the Georgina Basin, North Australia (AU samples) were also tested to investigate the effect of thermal maturity on sorption isotherms. Excess sorption isotherms were performed over a pressure range of 0-25 MPa at 46 degrees C. The effects of TOC content, thermal maturity, clay minerals, moisture content, pore properties, particle size, temperature, and pressure on methane sorption capacity were analysed. In addition, thermovaporisation gas chromatography (Tvap-GC) was used to measure the residual gas that is stored in the samples under atmospheric pressure and temperature conditions.

The results indicate that the maximum methane excess sorption of the Lower Silurian samples is between 0.045 and 0.064 mmol/g rock and that of Lower Cambrian samples is between 0.036 and 0.210 mmol/g rock. The Langmuir sorption capacity of the Lower Silurian samples ranges from 0.096 to 0.115 mmol/g rock, whereas that of the Lower Cambrian shale ranges from 0.077 to 0.310 mmol/g rock. These results are close to the sorption capacities of the Barnett (U.S.), Devonian-Mississippian ( Western Canada), and Alum ( Southern Scandinavia) shale samples. The shape of the sorption isotherms and methane sorption capacity vary from sample to sample. Under the measured pressure range, the isotherms of the selected immature AU Cambrian samples increase monotonously with pressure, whereas the overmature UYP samples exhibit maxima. The methane sorption capacity of the measured samples positively correlates with TOC content and exhibits a distinct linear relation. The TOC-normalised sorption capacity shows a positive correlation with thermal maturity; however, the corresponding pressure of maximum excess sorption and Langmuir pressure decrease substantially with increasing thermal maturity. The clay minerals show a positive effect on the TOC-normalised sorption capacity. The sorption capacity of clay minerals, however, should have been reduced by the moisture content. The two Lower Cambrian samples that have similar maturities were measured for porosity and pore-size distribution. The sample with a high TOC content shows a high total cumulative pore volume, surface area, total porosity and thus a higher sorption capacity than the sample with less TOC. In addition, larger-sized particles show slightly less sorption capacity than smaller-sized particles. The Tvap-GC results show that the residual gas content of core samples is evidently higher than that of the outcrop samples, which implies a remarkably negative effect of the weathering process. (C) 2014 Elsevier Ltd. All rights reserved.

入藏号: WOS:000335745400025

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0016-2361

eISSN: 1873-7153

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 299 条，共 381 条

标题: Shale characteristics in the southeastern Ordos Basin, China: Implications for hydrocarbon accumulation conditions and the potential of continental shales

作者: Tang, X (Tang, Xuan); Zhang, JC (Zhang, Jinchuan); Wang, XZ (Wang, Xiangzeng); Yu, BS (Yu, Bingsong); Ding, WL (Ding, Wenlong); Xiong, JY (Xiong, Jinyu); Yang, YT (Yang, Yiting); Wang, L (Wang, Long); Yang, C (Yang, Chao)

来源出版物: INTERNATIONAL JOURNAL OF COAL GEOLOGY 卷: 128 页: 32-46 DOI: 10.1016/j.coal.2014.03.005 出版年: AUG 1 2014

Web of Science 核心合集中的 "被引频次": 134

被引频次合计: 141

摘要: Continental shales in China are generally characterised by low thermal maturity and high clay content, characteristics that are significantly different from those of marine shales documented in the USA and elsewhere. Whether such continental shales have commercial hydrocarbon potential as marine shale in the USA is a question for the China petroleum industry. Recently, vertical drills in the lacustrine shales in the Yanchang Formation produced an average of two to five tons of oil and 1000-3000 m(3) of gas per day by reservoir hydraulic fracturing, which demonstrates that the continental shales can also achieve viable hydrocarbon production. Shale and gas samples collected from the Chang 7 (C7) and Chang 9 (C9) Members, Yanchang Formation in the southeastern Ordos Basin were examined for geochemical, petrologic and gas content analysis. The results show that the C7 and C9 Members developed a huge volume of organic-rich shales (with 2-4 wt.% TOC) in the deep or semideep lacustrine, characterised primarily by type-II kerogen, with a relatively low thermal maturity and a vitrinite reflectance ranging from 0.5 to 1.5% Ro, which decreases from west to east. The hydrocarbon product varies with the thermal maturity. In the southwestern corner, the gas content measured by canister desorption equals 1.15-3.49 m(3)/t rock, and the gas-absorption capacity ranges from 3 to 5 m3/t rock, whereas in the eastern part, the gas content is low, and oil production is 1-4 m(3)/day on average. Nanometre-scale pores and micro-fractures are well developed. All of this indicates that the continental shales in the southeastern Ordos Basin might have huge shale hydrocarbon resources. However, the clay content of the continental shales of C7 and C9, ranging from 40 to 60% of the bulk mineral content, are much higher than for gas produced in marine shales, which might lead to significant challenges for successful development. (C) 2014 Elsevier B.V. All rights reserved.

入藏号: WOS:000337986100004

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Energy & Fuels; Geosciences, Multidisciplinary

ISSN: 0166-5162

eISSN: 1872-7840

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 300 条，共 381 条

标题: Influence of Defects on the Photocatalytic Activity of ZnO

作者: Chen, DM (Chen, Daimei); Wang, ZH (Wang, Zhihong); Ren, TZ (Ren, Tiezhen); Ding, H (Ding, Hao); Yao, WQ (Yao, Wenqing); Zong, RL (Zong, Ruilong); Zhu, YF (Zhu, Yongfa)

来源出版物: JOURNAL OF PHYSICAL CHEMISTRY C 卷: 118 期: 28 页: 15300-15307 DOI: 10.1021/jp5033349 出版年: JUL 17 2014

Web of Science 核心合集中的 "被引频次": 232

被引频次合计: 240

摘要: The influence of defects on the photoactivity of ZnO has been revealed. The defects can be formed via ball-milling treatment, and part of the defects can be repaired via annealing treatment. The photocatalytic activity of the ZnO sharply decreased as the ball-milling speed and milling time increased. After the annealing treatment, the photocatalytic activity recovered partly but could not return to the activity of the pristine ZnO. The bulk defects such as oxygen vacancies (V-O), zinc vacancies (V-Zn) and a lot of nonradiative defects were formed after the milling treatment. The annealing treatment can only repair part of the bulk defects and nonradiative defects. Thus, only part of the photoactivity was recovered. The species trapping experiments showed that the introduction of the bulk defects did not change the photocatalytic mechanism. The main oxidative species for the pristine ZnO, the milled ZnO, and the annealed ZnO are photogenerated holes and hydroxyl radicals.

入藏号: WOS:000339368700024

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary

ISSN: 1932-7447

eISSN: 1932-7455

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 301 条，共 381 条

标题: Ce and F Comodification on the Crystal Structure and Enhanced Photocatalytic Activity of Bi2WO6 Photocatalyst under Visible Light Irradiation

作者: Huang, HW (Huang, Hongwei); Liu, K (Liu, Kun); Chen, K (Chen, Kai); Zhang, YL (Zhang, Yinglei); Zhang, YH (Zhang, Yihe); Wang, SC (Wang, Shichao)

来源出版物: JOURNAL OF PHYSICAL CHEMISTRY C 卷: 118 期: 26 页: 14379-14387 DOI: 10.1021/jp503025b 出版年: JUL 3 2014

Web of Science 核心合集中的 "被引频次": 269

被引频次合计: 276

摘要: The novel Ce and F codoped Bi2WO6 samples have been successfully obtained by a facile one-step hydrothermal reaction for the first time. They were characterized by X-ray diffraction patterns (XRD), scanning electron microscopy (SEM), transmission electron microscopy (TEM), high-resolution TEM (HRTEM), X-ray photoelectron spectroscopy (XPS), and UV-vis diffuse reflectance spectra (DRS) and photoluminescence (PL) spectra. The presence of Ce3+, Ce4+, and F- dopants in Bi2WO6 was confirmed by XPS. The change of microstructure and optical band gap has also been observed after the doping of Ce and F. Under visible light, the as-synthesized plate-like F-Ce-Bi2WO6 sample exhibits a much better visible-light-responsive photocatalytic performance than pure Bi2WO6 for the degradation of RhB and photocurrent (PC) generation. The mechanism of high photcatalytic activity was also suggested on the basis of the PL spectra, electrochemical impedance spectra (EIS), and active species trapping measurements. The results indicated that the synergistic effect of the Ce and F dopants is responsible for the efficient separation and migration of photoinduced charge carriers, thus resulting in the remarkably improved photocatalytic activity.

入藏号: WOS:000338693600033

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary

ISSN: 1932-7447

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 302 条，共 381 条

标题: Compositions of chromite, associated minerals, and parental magmas of podiform chromite deposits: The role of slab contamination of asthenospheric melts in suprasubduction zone environments

作者: Zhou, MF (Zhou, Mei-Fu); Robinson, PT (Robinson, Paul T.); Su, BX (Su, Ben-Xun); Gao, JF (Gao, Jian-Feng); Li, JW (Li, Jian-Wei); Yang, JS (Yang, Jing-Sui); Malpas, J (Malpas, John)

来源出版物: GONDWANA RESEARCH 卷: 26 期: 1 特刊: SI 页: 262-283 DOI: 10.1016/j.gr.2013.12.011 出版年: JUL 2014

Web of Science 核心合集中的 "被引频次": 151

被引频次合计: 173

摘要: Podiform chromitites in the mantle sections of ophiolites belong to either high-Cr (metallurgical) or high-Al (refractory) varieties. Their highly variable compositions are reflected by different Cr#s [100Cr / (Cr + Al)] and Cr203 and Al2O3 contents of the chromite, falling in the boninitic and MORB fields, respectively. Parental magmas of high-Cr chromitites have higher Sc, Mn, Co and Ni, and lower Ti, V, Zn and Ga concentrations than MORB melts; their trace-element patterns are similar to those of boninites, except for Ni and Zn. In contrast, high-Al chromitites have parental magmas characterized by generally flat MORB-normalized patterns, showing slight enrichments in V, Mn and Co, and depletion in Ni and Zn. Regardless of their compositions, both types of chromitites have chondrite-normalized platinum group element (PGE) patterns showing enrichment in IPGE and depletion in PPGE. A variety of platinum group minerals are typically present in both types, occurring either as euhedral inclusions or along fractures in chromite grains. These minerals have a wide span of Re-Os isotopic compositions, reflecting a variety of origins.

There is a diversity of unusual minerals and mineral inclusions associated with podiform chromitites. The presence of these minerals suggest that grains of amphibolite (plagioclase, amphibole and zircon) and eclogite (coesite, kyanite and garnet) were present in the magmas from which chromite crystallized. Multiphase mineral inclusions demonstrate that podiform chromitites form from hydrous mafic magmas in suprasubduction zone environments (SSZ). We propose a new model in which chromitite formation was involved in intra-oceanic subduction zones initiated in closing oceanic basins. Continued subduction carries oceanic and possibly continental crustal materials to deep levels where they are metamorphosed under greenschist, amphibolite and eclogite facies conditions. The tearing and breakoff of the subducted slab, possibly along the transitional contact between amphibolites and eclogites, create a slab window through which the underlying asthenosphere rises and melts to generate Cr-rich mafic magmas. These upward-migrating magmas pass through the subduction zone and assimilate the subducted slab. As a result of slab contamination, these magmas become more siliceous, more oxidized and more hydrous, rapidly triggering chromite crystallization. Minute grains of chromite are suspended in the upward-moving magmas as they migrate through the overlying metasomatized mantle wedge. Such chromite-bearing magmas eventually deposit chromite in magma conduits in the uppermost mantle close to the Moho where the upward flow changes from vertical to subhorizontal and velocity is greatly reduced.

Highly reduced and ultrahigh pressure minerals including diamonds are reported in literature both in podiform chromitites and host peridotites of ophiolites. Some of these minerals in association with host peridotites may have been brought by the uprising asthenosphere at mid-oceanic ridges due to the mantle convection. It is also possible that some diamonds may have formed in the subducted slab below about 150 km. Some minerals of subducted slabs are preserved because they are encapsulated in chromite grains where they are protected from the SSZ melts. Some of these SSZ mantle wedges are emplaced on land to become podiform chromititebearing ophiolites. (C) 2014 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000336338100016

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 303 条，共 381 条

标题: A new finding of the existence of hidden hyperchaotic attractors with no equilibria

作者: Wei, ZC (Wei, Zhouchao); Wang, RR (Wang, Rongrong); Liu, AP (Liu, Anping)

来源出版物: MATHEMATICS AND COMPUTERS IN SIMULATION 卷: 100 页: 13-23 DOI: 10.1016/j.matcom.2014.01.001 出版年: JUN 2014

Web of Science 核心合集中的 "被引频次": 139

被引频次合计: 140

摘要: The paper presents a new four-dimensional hyperchaotic system developed by extension of the generalized diffusionless Lorenz equations. The model is shown to not be equivalent to any hyperchaotic system that the authors know of. In particular, the model does not display any equilibria, but can exhibit two-scroll hyperchaos as well as chaotic, quasiperiodic and periodic dynamics. For certain parameter values, coexisting attractors can be observed, e.g. hyperchaotic and periodic attractors. Investigation of the proposed system is performed through a combination of numerical simulation and mathematical analysis in order to obtain time plots, phase portraits, Lyapunov exponents, and Poincare sections. (C) 2014 IMACS. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000335610200002

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Computer Science, Interdisciplinary Applications; Computer Science, Software Engineering; Mathematics, Applied

ISSN: 0378-4754

eISSN: 1872-7166

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 304 条，共 381 条

标题: Generalized Modeling of Spontaneous Imbibition Based on Hagen-Poiseuille Flow in Tortuous Capillaries with Variably Shaped Apertures

作者: Cai, JC (Cai, Jianchao); Perfect, E (Perfect, Edmund); Cheng, CL (Cheng, Chu-Lin); Hu, XY (Hu, Xiangyun)

来源出版物: LANGMUIR 卷: 30 期: 18 页: 5142-5151 DOI: 10.1021/la5007204 出版年: MAY 13 2014

Web of Science 核心合集中的 "被引频次": 288

被引频次合计: 296

摘要: Spontaneous imbibition of wetting liquids in porous media is a ubiquitous natural phenomenon which has received much attention in a wide variety of fields over several decades. Many traditional and recently presented capillary-driven flow models are derived based on Hagen-Poiseuille (H-P) flow in cylindrical capillaries. However, some limitations of these models have motivated modifications by taking into account different geometrical factors. In this work, a more generalized spontaneous imbibition model is developed by considering the different sizes and shapes of pores, the tortuosity of imbibition streamlines in random porous media, and the initial wetting-phase saturation. The interrelationships of accumulated imbibition weight, imbibition rate and gas recovery and the properties of the porous media, wetting liquids, and their interactions are derived analytically. A theoretical analysis and comparison denote that the presented equations can generalize several traditional and newly developed models from the literature. The proposed model was evaluated using previously published data for spontaneous imbibition measured in various natural and engineered materials including different rock types, fibrous materials, and silica glass. The test-results show that the generalized model can be used to characterize the spontaneous imbibition behavior of many different porous media and that pore shape cannot always be assumed to be cylindrical.

入藏号: WOS:000336020800013

PubMed ID: 24785579

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Chemistry, Multidisciplinary; Chemistry, Physical; Materials Science, Multidisciplinary

ISSN: 0743-7463

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 305 条，共 381 条

标题: Outward-growth of the Tibetan Plateau during the Cenozoic: A review

作者: Wang, CS (Wang, Chengshan); Dai, JG (Dai, Jingen); Zhao, XX (Zhao, Xixi); Li, YL (Li, Yalin); Graham, SA (Graham, Stephan A.); He, DF (He, Dengfa); Ran, B (Ran, Bo); Meng, J (Meng, Jun)

来源出版物: TECTONOPHYSICS 卷: 621 页: 1-43 DOI: 10.1016/j.tecto.2014.01.036 出版年: MAY 7 2014

Web of Science 核心合集中的 "被引频次": 244

被引频次合计: 290

摘要: The surface uplift history of the Tibetan Plateau (TP) offers a key testing ground for evaluating models of collisional tectonics and holds important implications for processes ranging from global cooling to the onset of the Asian monsoon. Various models have been proposed to reveal the surface uplift history of the TP, but controversies remain. We evaluate these models using data from sedimentology and stratigraphy, structural geology, magmatism, exhumation, and paleoaltimetry studies. Structural analyses indicate that thrust belts, which spread from the central TP outward toward its surrounding margins, accommodated most of the India-Asia convergence, and facilitated crustal shortening and thickening in the central TP. Eocene adakitic rocks located in the Qiangtang and the Lhasa blocks likely were generated by partial melting of an eclogitic source. Paleogene (50-30 Ma) potassic rocks only occur in the Qiangtang block, whereas Late Oligocene-Late Miocene (26-8 Ma) potassic rocks occur both in the Qiangtang and Lhasa blocks. Low-temperature thermochronologic ages in the central TP are older than 40-35 Ma, whereas those in the margins are younger than 20 Ma (mostly Late Miocene, and Pliocene/Pleistocene in age). Independent paleoaltimetry estimates suggest that the Lhasa and Qiangtang terranes attained their current elevations during the Eocene, most likely due to the initial collision between India and Lhasa, whereas the Hoh Xil basin area to the north and Himalayas to the south were still low, even below sea level in the latter case. We argue for an inside-out growth pattern for the Tibetan Plateau. The TP grew southward and northward from a nucleus of high topography and is likely to continue expanding along the Mazar Tagh fault to the northwest, the Kuantai Shan-Hei Shan-Longshou Shan to the northeast, the Longquan Shan to the east and the Shillong plateau to the south if the northward force of India would not diminished. (C) 2014 Elsevier B.V. All rights reserved.

入藏号: WOS:000336188800001

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0040-1951

eISSN: 1879-3266

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 306 条，共 381 条

标题: Ar-40/Ar-39 geochronological constraints on the formation of the Dayingezhuang gold deposit: New implications for timing and duration of hydrothermal activity in the Jiaodong gold province, China

作者: Yang, LQ (Yang, Li-Qiang); Deng, J (Deng, Jun); Goldfarb, RJ (Goldfarb, Richard J.); Zhang, J (Zhang, Jing); Gao, BF (Gao, Bang-Fei); Wang, ZL (Wang, Zhong-Liang)

来源出版物: GONDWANA RESEARCH 卷: 25 期: 4 特刊: SI 页: 1469-1483 DOI: 10.1016/j.gr.2013.07.001 出版年: MAY 2014

Web of Science 核心合集中的 "被引频次": 131

被引频次合计: 158

摘要: China's largest gold resource is located in the highly endowed northwestern part of the Jiaodong gold province. Most gold deposits in this area are associated with the NE-to NNE-trending shear zones on the margins of the 130-126 Ma Guojialing granite. These deposits collectively formed at ca. 120 +/- 5 Ma during rapid uplift of the granite. The Dayingezhuang deposit is a large (>120 t Au) orogenic gold deposit in the same area, but located along the eastern margin of the Late Jurassic Linglong Metamorphic Core Complex. New Ar-40/Ar-39 geochronology on hydrothermal sericite and muscovite from the Dayingezhuang deposit indicate the gold event is related to evolution of the core complex at 130 +/- 4 Ma and is the earliest important gold event that is well-documented in the province. The Dayingezhuang deposit occurs along the Linglong detachment fault, which defines the eastern edge of the ca. 160-150 Ma Linglong granite-granodiorite massif. The anatectic rocks of the massif were rapidly uplifted, at rates of at least 1 km/m.y. from depths of 25-30 km, to form the metamorphic core complex. The detachment fault, with Precambrian metamorphic basement rocks in the hangingwall and the Linglong granitoids and migmatites in the footwall, is characterized by early mylonitization and a local brittle overprinting in the footwall. Gold is associated with quartz-sericite-pyrite-K-feldspar altered footwall cataclasites at the southernmost area of the brittle deformation along the detachment fault. Our results indicate that there were two successive, yet distinct gold-forming tectonic episodes in northwestern Jiaodong. One event first reactivated the detachment fault along the edge of the Linglong massif between 134 and 126 Ma, and then a second reactivated the shears along the margins of the Guojialing granite. Both events may relate to a component of northwest compression after a middle Early Cretaceous shift from regional NW-SE extension to a NE-SW extensional regime. (C) 2013 The Authors. Published by Elsevier BM, on behalf of International Association for Gondwana Research

入藏号: WOS:000347279400013

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 307 条，共 381 条

标题: The western Central Asian Orogenic Belt: A window to accretionary orogenesis and continental growth

作者: Xiao, WJ (Xiao, Wenjiao); Santosh, M (Santosh, M.)

来源出版物: GONDWANA RESEARCH 卷: 25 期: 4 特刊: SI 页: 1429-1444 DOI: 10.1016/j.gr.2014.01.008 出版年: MAY 2014

Web of Science 核心合集中的 "被引频次": 389

被引频次合计: 434

摘要: The architecture of accretionary orogens is a key to understand continental growth. Here we present an overview of the orogenic components and their amalgamation in the western Central Asian Orogenic Belt (CAOB). The CAOB records the convergence and interactions among various types of orogenic components including the Japan-type, Mariana-type, and Alaska-Aleutian-type arc systems, as well as the active marginal sequences of the Siberia Craton, which incorporated wide accretionary complexes and accreted arcs and terranes. During construction of the CAOB, the Kazakhstan arc chain was characterized by multiple subduction, whereas the northern fringe of the Tarim Craton remained mostly as a passive margin. The multiple convergence and accretions among these various orogenic components generated huge orogenic collages in the late Paleozoic and even in the early Triassic, involving parallel amalgamation, circum-microcontinent amalgamation and oroclinal bending. The preservation of trapped basins played a significant role in orogenesis with some parts of the oceanic plate being subducted and others behaving as rigid units. The orogenesis in the CAOB was long-lived, lasting for more than 800 m.y., involving multiple-subduction and long, continuous accretion, and featuring the complexity of accretionary orogenesis and continent growth. (C) 2014 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000347279400011

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 308 条，共 381 条

标题: Constructing a Novel No-Equilibrium Chaotic System

作者: Pham, VT (Viet-Thanh Pham); Volos, C (Volos, Christos); Jafari, S (Jafari, Sajad); Wei, ZC (Wei, Zhouchao); Wang, X (Wang, Xiong)

来源出版物: INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS 卷: 24 期: 5 文献号: 1450073 DOI: 10.1142/S0218127414500734 出版年: MAY 2014

Web of Science 核心合集中的 "被引频次": 106

被引频次合计: 106

摘要: This paper introduces a new no-equilibrium chaotic system that is constructed by adding a tiny perturbation to a simple chaotic flow having a line equilibrium. The dynamics of the proposed system are investigated through Lyapunov exponents, bifurcation diagram, Poincare map and period-doubling route to chaos. A circuit realization is also represented. Moreover, two other new chaotic systems without equilibria are also proposed by applying the presented methodology.

入藏号: WOS:000336743900018

出版商: WORLD SCIENTIFIC PUBL CO PTE LTD

出版商地址: 5 TOH TUCK LINK, SINGAPORE 596224, SINGAPORE

Web of Science 类别: Mathematics, Interdisciplinary Applications; Multidisciplinary Sciences

ISSN: 0218-1274

eISSN: 1793-6551

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 309 条，共 381 条

标题: Shale Gas Potential of the Major Marine Shale Formations in the Upper Yangtze Platform, South China, Part III: Mineralogical, Lithofacial, Petrophysical, and Rock Mechanical Properties

作者: Tan, JQ (Tan, Jingqiang); Horsfield, B (Horsfield, Brian); Fink, R (Fink, Reinhard); Krooss, B (Krooss, Bernhard); Schulz, HM (Schulz, Hans-Martin); Rybacki, E (Rybacki, Erik); Zhang, JC (Zhang, Jinchuan); Boreham, CJ (Boreham, Christopher J.); van Graas, G (van Graas, Ger); Tocher, BA (Tocher, Bruce A.)

来源出版物: ENERGY & FUELS 卷: 28 期: 4 页: 2322-2342 DOI: 10.1021/ef4022703 出版年: APR 2014

Web of Science 核心合集中的 "被引频次": 113

被引频次合计: 120

摘要: The marine black shale formations on the Upper Yangtze Platform, South China, are currently exploration targets for shale gas. Here, we report on the mineralogy, lithofacies, petrophysics, and rock mechanics of samples collected from the Ediacaran (Upper Sinian), Lower Cambrian, and Lower Silurian black shale intervals. All three formations are composed of high proportion of quartz, low content of clay, and rare or nonexistent content of carbonates. The Ediacaran and Lower Cambrian shales deposited in restricted deep water marine platform to marine basin environments are characterized by a higher quartz content and lower clay content than the Lower Silurian shales that were deposited in a more restricted marine basin environment. The carbonate content varies from 0 to over 50%, with the higher values measured in the Lower Silurian samples. These stratigraphic units were formed during bottom water anoxic conditions; therefore, they were rarely influenced by bioturbation. Lithologically, laminated and nonlaminated siliceous mudstones predominate, with minor contributions of other lithotypes. Pores generally have diameters in the nanometer (nm) to micrometer (mu m) range, and numerous pores occur in organic matter. Most of the measured samples have porosities less than 4%, although a few samples show porosity in excess of 10%. Pores with radii less than 50 nm contribute significantly to total pore volume and total porosity. Permeability is extremely low, and helium permeability coefficients (Klinkenberg corrected permeability coefficient) are less than 20.2 nD (nano-Darcy, similar to 2 x 10(-20) m(2)). The rock mechanical properties of the samples are characterized by high brittle behavior, which coincides with their high compressive and tensile strengths and elastic properties. The Lower Cambrian shale is generally more brittle than the Lower Silurian shales, which possess a relatively higher content of clay minerals. The rock mechanical properties of the measured samples, however, depend on the overall mineral compositions and physical properties.

入藏号: WOS:000334730700005

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0887-0624

eISSN: 1520-5029

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 310 条，共 381 条

标题: Provincial allocation of carbon emission reduction targets in China: An approach based on improved fuzzy cluster and Shapley value decomposition

作者: Yu, SW (Yu, Shiwei); Wei, YM (Wei, Yi-Ming); Wang, K (Wang, Ke)

来源出版物: ENERGY POLICY 卷: 66 页: 630-644 DOI: 10.1016/j.enpol.2013.11.025 出版年: MAR 2014

Web of Science 核心合集中的 "被引频次": 110

被引频次合计: 117

摘要: An approach to determine carbon emission reduction target allocation based on the particle swarm optimization (PSO) algorithm, fuzzy c-means (FCM) clustering algorithm, and Shapley decomposition (PSO-FCM-Shapley) is proposed in this study. The method decomposes total carbon emissions into an interaction result of four components (i.e., emissions from primary, secondary, and tertiary industries, and from residential areas) which composed totally by 13 macro influential factors according to the KAYA identity. Then, 30 provinces in China are clustered into four classes according to the influential factors via the PSO-FCM clustering method. The key factors that determine emission growth in the provinces representing each cluster are investigated by applying Shapley value decomposition. Finally, based on guaranteed survival emissions, the reduction burden is allocated by controlling the key factors that decelerate CO2 emission growth rate according to the present economic development level, energy endowments, living standards, and the emission intensity of each province. A case study of the allocation of CO2 intensity reduction targets in China by 2020 is then conducted via the proposed method. The per capita added value of the secondary industry is the primary factor for the increasing carbon emissions in provinces. Therefore, China should limit the growth rate of its secondary industry to mitigate emission growth. Provinces with high cardinality of emissions have to shoulder the largest reduction, whereas provinces with low emission intensity met the minimum requirements for emission in 2010. Fifteen provinces are expected to exceed the national average decrease rates from 2011 to 2020. (C) 2013 Elsevier Ltd. All rights reserved.

入藏号: WOS:000332135900057

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Economics; Energy & Fuels; Environmental Sciences; Environmental Studies

ISSN: 0301-4215

eISSN: 1873-6777

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 311 条，共 381 条

标题: The dilemma of the Jiaodong gold deposits: Are they unique?

作者: Goldfarb, RJ (Goldfarb, Richard J.); Santosh, M (Santosh, M.)

来源出版物: GEOSCIENCE FRONTIERS 卷: 5 期: 2 页: 139-153 DOI: 10.1016/j.gsf.2013.11.001 出版年: MAR 2014

Web of Science 核心合集中的 "被引频次": 250

被引频次合计: 275

摘要: The ca. 126-120 Ma Au deposits of the Jiaodong Peninsula, eastern China, define the country's largest gold province with an overall endowment estimated as >3000 t Au. The vein and disseminated ores are hosted by NE- to NNE-trending brittle normal faults that parallel the margins of ca. 165-150 Ma, deeply emplaced, lower crustal melt granites. The deposits are sited along the faults for many tens of kilometers and the larger orebodies are associated with dilatational jogs. Country rocks to the granites are Precambrian high-grade metamorphic rocks located on both sides of a Triassic suture between the North and South China blocks. During early Mesozoic convergent deformation, the ore-hosting structures developed as ductile thrust faults that were subsequently reactivated during Early Cretaceous "Yanshanian" intracontinental extensional deformation and associated gold formation.

Classification of the gold deposits remains problematic. Many features resemble those typical of orogenic Au including the linear structural distribution of the deposits, mineralization style, ore and alteration assemblages, and ore fluid chemistry. However, Phanerozoic orogenic Au deposits are formed by prograde metamorphism of accreted oceanic rocks in Cordilleran-style orogens. The Jiaodong deposits, in contrast, formed within two Precambrian blocks approximately 2 billion years after devolatilization of the country rocks, and thus require a model that involves alternative fluid and metal sources for the ores. A widespread suite of ca. 130-123 Ma granodiorites overlaps temporally with the ores, but shows a poor spatial association with the deposits. Furthermore, the deposit distribution and mineralization style is atypical of ores formed from nearby magmas. The ore concentration requires fluid focusing during some type of sub-crustal thermal event, which could be broadly related to a combination of coeval lithospheric thinning, asthenospheric upwelling, paleo-Pacific plate subduction, and seismicity along the continental-scale Tan-Lu fault. Possible ore genesis scenarios include those where ore fluids were produced directly by the metamorphism of oceanic lithosphere and overlying sediment on the subducting paleo-Pacific slab, or by devolatilization of an enriched mantle wedge above the slab. Both the sulfur and gold could be sourced from either the oceanic sediments or the serpentinized mantle. A better understanding of the architecture of the paleo-Pacific slab during Early Cretaceous below the eastern margin of China is essential to determination of the validity of possible models. (C) 2013, China University of Geosciences (Beijing) and Peking University. Production and hosting by Elsevier B.V. All rights reserved.

入藏号: WOS:000333138600001

出版商: CHINA UNIV GEOSCIENCES, BEIJING

出版商地址: 29 XUEYUAN RD, HAIDIAN DISTRICT, 100083, PEOPLES R CHINA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1674-9871

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 312 条，共 381 条

标题: Continental orogenesis from ocean subduction, continent collision/subduction, to orogen collapse, and orogen recycling: The example of the North Qaidam UHPM belt, NW China

作者: Song, SG (Song, Shuguang); Niu, YL (Niu, Yaoling); Su, L (Su, Li); Zhang, C (Zhang, Cong); Zhang, LF (Zhang, Lifei)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 129 页: 59-84 DOI: 10.1016/j.earscirev.2013.11.010 出版年: FEB 2014

Web of Science 核心合集中的 "被引频次": 196

被引频次合计: 248

摘要: The North Qaidam ultra-high pressure metamorphic (UHPM) belt in the northern Tibetan Plateau records a complete history of the evolution of a continental orogen from prior seafloor subduction, to continental collision and subduction, and to the ultimate orogen collapse in the time period from the Neoproterozoic to the Paleozoic. Lithologies in this UHPM belt consist predominantly of felsicgneisses containing blocks of edogite and peridotite. The 1120-900 Ma granitic and psammitic/pelitic gneisses compose the majority of the UHPM belt and is genetically associated with the previous orogenic cycle of Grenville-age, whereas protoliths of the HUPM eclogites are of both the 850-820 Ma continental flood basalts (CFBs) and the 540-500 Ma oceanic crust (ophiolite). The early stage of quartz-stable eclogite-facies metamorphism took place at -445-473 Ma, the same age as that of the HP rocks in the North Qilian oceanic suture zone, representing the earliest subducting seafloor rocks exhumed and preserved. Coesite-bearing zircons from the metapelite and eclogite, diamond-bearing zircons from garnet peridotites constrain the UHP metamorphic age of -438-420 Ma, which represents the timing of continental subduction at depths of 100-200 km, -10-20 m.y. younger than the early stage of the (lian seafloor subduction. Therefore, deep subduction of continental crust should be the continuation of oceanic subduction that is pulled down by the sinking oceanic lithosphere or pushed down by the overriding upper plate, which is an expected and inevitable consequence for the scenario of passive continental margins. Partial melting of subducted ocean crust might occur in response to continental subduction at -435 Ma.

The UHPM rocks started to exhume accompanied by mountain building and deposition of Early Devonian molasses in the North Qilian region at -420 Ma. Decoupling of oceanic subduction zone and continent UHPM terranes may be attributed to the different exhumation path and mechanism between the subducted oceanic and continent crusts, or rollback of subduction zone. Decompression melting of UHP metamorphosed slab and continental crust during exhumation is responsible for the generation of adaldtic melts and S-type granite. Mountain collapse and lithosphere extension happened in the period of -400-360 Ma and formed diorite-granite intrusions in the UHPM belt, which marked the end of a complete orogenic cycle.

This UHP metamorphic belt presents an example of multi-epoch tectonic recycles, represented by recombination of the Neoproterozoic Grenvillian orogenesis and the Early Paleozoic Caledonian orogenesis. (C) 2013 Elsevier B.V. All rights reserved.

入藏号: WOS:000331919500004

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 313 条，共 381 条

标题: Distribution of porphyry deposits in the Eurasian continent and their corresponding tectonic settings

作者: Mao, JW (Mao, Jingwen); Pirajno, F (Pirajno, Franco); Lehmann, B (Lehmann, Bernd); Luo, MC (Luo, Maocheng); Berzina, A (Berzina, Anita)

来源出版物: JOURNAL OF ASIAN EARTH SCIENCES 卷: 79 特刊: SI 页: 576-584 DOI: 10.1016/j.jseaes.2013.09.002 子辑: B 出版年: JAN 5 2014

Web of Science 核心合集中的 "被引频次": 153

被引频次合计: 181

摘要: In the Eurasian continent there are three huge metallogenic belts of Cu and Mo porphyry deposits, comprising the Paleozoic Central Asian Ore Belt in the north, the Tethyan Eurasian Ore Belt of Jurassic to Cenozoic age in the southwest, and the East Margin Ore Belt of the Eurasian Continent of Jurassic to Cretaceous age in the east. The latter is considered to be part of the vast Circum-Pacific ore belt. Some of the main features of the spatial-temporal distribution of Cu and Mo porphyry systems and related geodynamic processes of the three metallogenic belts are described. In particular, the key role of post-subduction - related porphyry ore systems is emphasized, comprising collisional and post-collisional Cu-Mo porphyry deposits during the geological history of the Eurasian continent. The recurrent feature of these ore systems and related felsic rocks is their derivation from partial melting of stagnant or residual oceanic slabs, and mixing with a variable amount of crustal material during magma ascent to shallower levels. (C) 2013 Published by Elsevier Ltd.

入藏号: WOS:000330605000002

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1367-9120

eISSN: 1878-5786

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 314 条，共 381 条

标题: The supercontinent cycle: A retrospective essay

作者: Nance, RD (Nance, R. Damian); Murphy, JB (Murphy, J. Brendan); Santosh, M (Santosh, M.)

来源出版物: GONDWANA RESEARCH 卷: 25 期: 1 特刊: SI 页: 4-29 DOI: 10.1016/j.gr.2012.12.026 出版年: JAN 2014

Web of Science 核心合集中的 "被引频次": 315

被引频次合计: 341

摘要: The recognition that Earth history has been punctuated by supercontinents, the assembly and breakup of which have profoundly influenced the evolution of the geosphere, hydrosphere, atmosphere and biosphere, is arguably the most important development in Earth Science since the advent of plate tectonics. But whereas the widespread recognition of the importance of supercontinents is quite recent, the concept of a supercontinent cycle is not new and advocacy of episodicity in tectonic processes predates plate tectonics. In order to give current deliberations on the supercontinent cycle some historical perspective, we trace the development of ideas concerning long-term episodicity in tectonic processes from early views on episodic orogeny and continental crust formation, such as those embodied in the chelogenic cycle, through the first realization that such episodicity was the manifestation of the cyclic assembly and breakup of supercontinents, to the surge in interest in supercontinent reconstructions. We then chronicle some of the key contributions that led to the cycle's widespread recognition and the rapidly expanding developments of the past ten years. (C) 2013 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000328099900002

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 315 条，共 381 条

标题: Phanerozoic continental growth and gold metallogeny of Asia

作者: Goldfarb, RJ (Goldfarb, Richard J.); Taylor, RD (Taylor, Ryan D.); Collins, GS (Collins, Gregory S.); Goryachev, NA (Goryachev, Nikolay A.); Orlandini, OF (Orlandini, Omero Felipe)

来源出版物: GONDWANA RESEARCH 卷: 25 期: 1 特刊: SI 页: 48-102 DOI: 10.1016/j.gr.2013.03.002 出版年: JAN 2014

Web of Science 核心合集中的 "被引频次": 316

被引频次合计: 354

摘要: The Asian continent formed during the past 800 m.y. during late Neoproterozoic through Jurassic closure of the Tethyan ocean basins, followed by late Mesozoic circum-Pacific and Cenozoic Himalayan orogenies. The oldest gold deposits in Asia reflect accretionary events along the margins of the Siberia, Kazakhstan, North China, Tarim-Karakum, South China, and Indochina Precambrian blocks while they were isolated within the Paleotethys and surrounding Panthalassa Oceans. Orogenic gold deposits are associated with large-scale, terrane-bounding fault systems and broad areas of deformation that existed along many of the active margins of the Precambrian blocks. Deposits typically formed during regional transpressional to transtensional events immediately after to as much as 100 m.y. subsequent to the onset of accretion or collision. Major orogenic gold provinces associated with this growth of the Asian continental mass include: (1) the ca. 750 Ma Yenisei Ridge, ca. 500 Ma East Sayan, and ca. 450-350 Ma Patom provinces along the southern margins of the Siberia craton; (2) the 450 Ma Charsk belt of north-central Kazakhstan; (3) the 310-280 Ma Kalba belt of NE Kazakhstan, extending into adjacent NW Xinjiang, along the Siberia-Kazakhstan suture; (4) the ca. 300-280 Ma deposits within the Central Asian southern and middle Tien Shan (e.g., Kumtor, Zarmitan, Muruntau), marking the closure of the Turkestan Ocean between Kazakhstan and the Tarim-Karalcum block; (5) the ca. 190-125 Ma Transbaikal deposits along the site of Permian to Late Jurassic diachronous closure of the Mongol-Okhotsk Ocean between Siberia and Mongolia/North China; (6) the probable Late Silurian-Early Devonian Jiagnan belt formed along the margin of Gondwana at the site of collision between the Yangtze and Cathaysia blocks; (7) Triassic deposits of the Paleozoic Qilian Shan and West Qinling orogens along the SW margin of the North China block developed during collision of South China; and (8) Jurassic(?) ores on the margins of the Subumusu block in Myanmar and Malaysia. Circum-Pacific tectonism led to major orogenic gold province formation along the length of the eastern side of Asia between ca. 135 and 120 Ma, although such deposits are slightly older in South Korea and slightly younger in the Amur region of the Russian Southeast. Deformation related to collision of the Kolyma-Omolon microcontinent with the Pacific margin of the Siberia craton led to formation of 136-125 Ma ores of the Yana-Kolyma belt (Natalka, Sarylakh) and 125-119 Ma ores of the South Verkhoyansk synclinorium (Nezhdaninskoe). Giant ca. 125 Ma gold provinces developed in the late Archean uplifted basement of the decratonized North China block, within its NE edge and into adjacent North Korea, in the Jiaodong Peninsula, and in the Qinling Mountains. The oldest gold-bearing magmatic-hydrothermal deposits of Asia include the ca. 485 Ma Duobaoshan porphyry within a part of the Tuva-Mongol arc, ca. 355 Ma low-sulfidation epithermal deposits (Kubaka) of the Omolon terrane accreted to eastern Russia, and porphyries (Bozshakol, Taldy Bulak) within Ordovican to Early Devonian oceanic arcs formed off the Kazakhstan microcontinent The Late Devonian to Carboniferous was marked by widespread gold-rich porphyry development along the margins of the closing Ob-Zaisan, Junggar-Balkhash, and Turkestan basins (Amalyk, Oyu Tolgoi); most were formed in continental arcs, although the giant Oyu Tolgoi porphyry was part of a near-shore oceanic arc.

Permian subduction-related deformation along the east side of the Indochina block led to ca. 300 Ma gold-bearing skarn and disseminated gold ore formation in the Truong Son fold belt of Laos, and along the west side to ca. 250 Ma gold-bearing skarns and epithermal deposits in the Loei fold belt of Laos and Thailand. In the Mesozoic Transbaikal region, extension along the basin margins subsequent to Mongol-Okhotsk closure was associated with ca. 150-125 Ma formation of important auriferous epithermal (Balei), skarn (Bystray), and porphyry (Kultuminskoe) deposits. In northeastern Russia, Early Cretaceous Pacific margin subduction and Late Cretaceous extension were associated with epithermal gold-deposit formation in the Uda-Murgal (Julietta) and Okhotsk-Chukotka (Dukat, Kupol) volcanic belts, respectively. In southeastern Russia, latest Cretaceous to Oligocene extension correlates with other low-sulfidation epithermal ores that formed in the East Sikhote-Alin volcanic belt. Other extensional events, likely related to changing plate dynamics along the Pacific margin of Asia, relate to epithermal-skarn-porphyry districts that formed at ca. 125-85 Ma in northeastmost China and ca. 105-90 Ma in the Coast Volcanic belt of SE China. The onset of strike slip along a part of the southeastern Pacific margin appears to correlate with the giant 148-135 Ma gold-rich porphyry-skarn province of the lower and middle Yangtze River. It is still controversial as to whether true Carlin-like gold deposits exist in Asia. Those deposits that most closely resemble the Nevada (USA) ores are those in the Permo-Triassic Youjiang basin of SW China and NE Vietnam, and are probably Late Triassic in age, although this is not certain. Other Carlin-like deposits have been suggested to exist in the Sepon basin of Laos and in the Mongol-Okhotsk region (Kuranakh) of Transbaikal. Published by Elsevier B.V. on behalf of International Association for Gondwana Research.

入藏号: WOS:000328099900004

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 316 条，共 381 条

标题: Accretionary complexes in the Asia-Pacific region: Tracing archives of ocean plate stratigraphy and tracking mantle plumes

作者: Safonova, IY (Safonova, I. Yu); Santosh, M (Santosh, M.)

来源出版物: GONDWANA RESEARCH 卷: 25 期: 1 特刊: SI 页: 126-158 DOI: 10.1016/j.gr.2012.10.008 出版年: JAN 2014

Web of Science 核心合集中的 "被引频次": 284

被引频次合计: 321

摘要: The accretionary complexes of Central and East Asia (Russia, Kazakhstan, Kyrgyzstan, Tajikistan, Mongolia, and China) and the Western Pacific (China, Japan, Russia) preserve valuable records of ocean plate stratigraphy (UPS). From a comprehensive synthesis of the nature of occurrence, geochemical characteristics and geochronological features of the oceanic island basalts (OM) and ophiolite units in the complexes, we track extensive plume-related magmatism in the Paleo-Asian and Paleo-Pacific Oceans. We address the question of continuous versus episodic intraplate magmatism and its contribution to continental growth. An evaluation of the processes of subduction erosion and accretion illustrates continental growth at the active margins of the Siberian, Kazakhstan, Tarim and North China blocks, the collision of which led to the construction of the Central Asian Orogenic Belt (CAOB). Most of the OIB-bearing UPS units of the CAOB and the Western Pacific formed in relation to two superplumes: the Asian (late Neoproterozoic) and the Pacific (Cretaceous), with a continuing hot mantle upwelling in the Pacific region that contributes to the formation of modern OIBs. Our study provides further insights into the processes of continental construction because the accreted seamounts play an important role in the growth of convergent margins and enhance the accumulation of fore-arc sediments. (C) 2012 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000328099900006

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 317 条，共 381 条

标题: Metamorphism and tectonic evolution of the Lhasa terrane, Central Tibet

作者: Zhang, ZM (Zhang, Z. M.); Dong, X (Dong, X.); Santosh, M (Santosh, M.); Zhao, GC (Zhao, G. C.)

来源出版物: GONDWANA RESEARCH 卷: 25 期: 1 特刊: SI 页: 170-189 DOI: 10.1016/j.gr.2012.08.024 出版年: JAN 2014

Web of Science 核心合集中的 "被引频次": 162

被引频次合计: 185

摘要: The Lhasa terrane in southern Tibet is composed of Precambrian crystalline basement, Paleozoic to Mesozoic sedimentary strata and Paleozoic to Cenozoic magmatic rocks. This terrane has long been accepted as the last crustal block to be accreted with Eurasia prior to its collision with the northward drifting Indian continent in the Cenozoic. Thus, the Lhasa terrane is the key for revealing the origin and evolutionary history of the Himalayan-Tibetan orogen. Although previous models on the tectonic development of the orogen have much evidence from the Lhasa terrane, the metamorphic history of this terrane was rarely considered. This paper provides an overview of the temporal and spatial characteristics of metamorphism in the Lhasa terrane based mostly on the recent results from our group, and evaluates the geodynamic settings and tectonic significance. The Lhasa terrane experienced multistage metamorphism, including the Neoproterozoic and Late Paleozoic HP metamorphism in the oceanic subduction realm, the Early Paleozoic and Early Mesozoic MP metamorphism in the continent-continent collisional zone, the Late Cretaceous HT/MP metamorphism in the mid-oceanic ridge subduction zone, and two stages of Cenozoic MP metamorphism in the thickened crust above the continental subduction zone. These metamorphic and associated magmatic events reveal that the Lhasa terrane experienced a complex tectonic evolution from the Neoproterozoic to Cenozoic. The main conclusions arising from our synthesis are as follows: (1) The Lhasa block consists of the North and South Lhasa terranes, separated by the Paleo-Tethys Ocean and the subsequent Late Paleozoic suture zone. (2) The crystalline basement of the North Lhasa terrane includes Neoproterozoic oceanic crustal rocks, representing probably the remnants of the Mozambique Ocean derived from the break-up of the Rodinia supercontinent. (3) The oceanic crustal basement of North Lhasa witnessed a Late Cryogenian (similar to 650 Ma) HP metamorphism and an Early Paleozoic (similar to 485 Ma) MP metamorphism in the subduction realm associated with the closure of the Mozambique Ocean and the final amalgamation of Eastern and Western Gondwana, suggesting that the North Lhasa terrane might have been partly derived from the northern segment of the East African Orogen. (4) The northern margin of Indian continent including the North and South Lhasa, and Qiangtang terranes, experienced Early Paleozoic magmatism, indicating an Andean-type orogeny that resulted from the subduction of the Proto-Tethys Ocean after the final amalgamation of Gondwana. (5) The Lhasa and Qiangtang terranes witnessed Middle Paleozoic (similar to 360 Ma) magmatism, suggesting an Andean-type orogeny derived from the subduction of the Paleo-Tethys Ocean. (6) The closure of Paleo-Tethys Ocean between the North and South Lhasa terranes and subsequent terrane collision resulted in the formation of Late Permian (similar to 260 Ma) HP metamorphic belt and Triassic (220 Ma) MP metamorphic belt. (7) The South Lhasa terrane experienced Late Cretaceous (similar to 90 Ma) Andean-type orogeny, characterized by the regional HT/MP metamorphism and coeval intrusion of the voluminous Gangdese batholith during the northward subduction of the Neo-Tethyan Ocean. (8) During the Early Cenozoic (55-45 Ma), the continent-continent collisional orogeny has led to the thickened crust of the South Lhasa terrane experiencing MP amphibolite-facies metamorphism and syn-collisional magmatism.

(9) Following the continuous continent convergence, the South Lhasa terrane also experienced MP metamorphism during Late Eocene (40-30 Ma). (10) During Mesozoic and Cenozoic, two different stages of paired metamorphic belts were formed in the oceanic or continental subduction zones and the middle and lower crust of the hanging wall of the subduction zone. The tectonic imprints from the Lhasa terrane provide excellent examples for understanding metamorphic processes and geodynamics at convergent plate boundaries. (C) 2012 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000328099900008

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 318 条，共 381 条

标题: Metallogeny and craton destruction: Records from the North China Craton

作者: Li, SR (Li, Sheng-Rong); Santosh, M (Santosh, M.)

来源出版物: ORE GEOLOGY REVIEWS 卷: 56 特刊: SI 页: 376-414 DOI: 10.1016/j.oregeorev.2013.03.002 出版年: JAN 2014

Web of Science 核心合集中的 "被引频次": 169

被引频次合计: 197

摘要: The link between metallogeny and craton destruction in the North China Craton (NCC) remains poorly understood, particularly the mechanisms within the interior of the craton. In this overview, we summarize the major stages in the history of formation and evolution of the NCC, the spatio-temporal distribution and types of major ore species, as well as mantle contribution to the metallogeny, in an attempt to evaluate the geodynamic settings of metallogeny and the mechanisms of formation of the ore deposits. The early Precambrian history of the NCC witnessed the amalgamation of micro-blocks and construction of the fundamental tectonic architecture of the craton by 2.5 Ga. The boundaries of these micro-blocks and the margins of the NCC remained as weak zones and were the principal locales along which inhomogeneous destruction of the craton occurred during later tectonothermal events. These zones record the formation of orogeny related gold, copper, iron and titanium during the early to middle Paleoproterozoic with ages ranging from 2.5 to 1.8 Ma. The Early Ordovician kimberlite and diamond mineralization at ca. 480 Ma, the Late Carboniferous and Early to middle Permian calc-alkaline, I-type granitoids and gold deposits of 324-300 Ma, and the Triassic alkaline rocks and gold silver-polymetallic deposits occurring along these zones and the margins of the blocks correlate with rising mantle plume, southward subduction of the Siberian plate and northward subduction of the Yangtze plate, respectively. The voluminous Jurassic granitoids and Cretaceous intrusives carrying gold, molybdenum, copper, lead and zinc deposits are also localized along the weak zones and block margins. The concentration of most of these deposits in the eastern part of the NCC invokes correlation with lithosphere thinning associated with the westward subduction of the Pacific plate. Although magmatism and mineralization have been recorded along the margins and few places within the interior of the NCC in the Jurassic, their peak occurred in the Cretaceous in the eastern part of the NCC, marking large scale destruction of the craton at this time. The junctions of the boundaries between the micro-continental blocks are characterized by extensive inhomogeneous thinning. We propose that these junctions are probably for future mineral exploration targeting in the NCC. (C) 2013 Elsevier B.V. All rights reserved.

入藏号: WOS:000329530700024

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geology; Mineralogy; Mining & Mineral Processing

ISSN: 0169-1368

eISSN: 1872-7360

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 319 条，共 381 条

标题: Qinghu zircon: A working reference for microbeam analysis of U-Pb age and Hf and O isotopes

作者: Li, XH (Li XianHua); Tang, GQ (Tang GuoQiang); Gong, B (Gong Bing); Yang, YH (Yang YueHeng); Hou, KJ (Hou KeJun); Hu, ZC (Hu ZhaoChu); Li, QL (Li QiuLi); Liu, Y (Liu Yu); Li, WX (Li WuXian)

来源出版物: CHINESE SCIENCE BULLETIN 卷: 58 期: 36 页: 4647-4654 DOI: 10.1007/s11434-013-5932-x 出版年: DEC 2013

Web of Science 核心合集中的 "被引频次": 348

被引频次合计: 362

摘要: Zircon is the most useful mineral for studies in U-Pb geochronology and Hf and O isotope geochemistry. Matrix effect is a major problem of the microbeam techniques such as SIMS and LA-(MC)-ICPMS. Therefore, external standardization using well-characterized natural zircon standards is fundamental for accurate microbeam measurements. While the isotopic geochronology and geochemistry laboratories equipped with microbeam analytical facilities have been increasingly established in China during the past decade, applications of the isotopic microanalysis are still limited due to shortage of available standards. We report here the Qinghu zircon as a potential new working reference for microbeam analysis of zircon U-Pb age and O-Hf isotopes. This zircon was separated from the Qinghu quartz monzonite from the western Nanling Range, Southeast China. It is fairly homogeneous in U-Pb age and Hf and O isotopes in terms of large amounts of mircobeam measurements by LA-MC-ICPMS and SIMS at the scales of 20-60 mu m. SIMS measurements yield consistent Pb-206/U-238 age within analytical uncertainties with that obtained by ID-TIMS. Precise determinations of O isotopes by IRMS and Hf isotopes by solution MC-ICPMS are in good agreement with the statistical mean of microbeam measurements. We recommend U-Pb age of = 159.5 +/- 0.2 Ma (2SE), delta O-18 = 5.4aEuro degrees +/- 0.2aEuro degrees (2SD) and Hf-176/Hf-177 = 0.283002 +/- 0.000004 (2SD) as the best reference values for the Qinghu zircon.

入藏号: WOS:000327482400018

出版商: SCIENCE PRESS

出版商地址: 16 DONGHUANGCHENGGEN NORTH ST, BEIJING 100717, PEOPLES R CHINA

Web of Science 类别: Multidisciplinary Sciences

ISSN: 1001-6538

eISSN: 1861-9541

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 320 条，共 381 条

标题: Differential Evolution With Ranking-Based Mutation Operators

作者: Gong, WY (Gong, Wenyin); Cai, ZH (Cai, Zhihua)

来源出版物: IEEE TRANSACTIONS ON CYBERNETICS 卷: 43 期: 6 页: 2066-2081 DOI: 10.1109/TCYB.2013.2239988 出版年: DEC 2013

Web of Science 核心合集中的 "被引频次": 207

被引频次合计: 221

摘要: Differential evolution (DE) has been proven to be one of the most powerful global numerical optimization algorithms in the evolutionary algorithm family. The core operator of DE is the differential mutation operator. Generally, the parents in the mutation operator are randomly chosen from the current population. In nature, good species always contain good information, and hence, they have more chance to be utilized to guide other species. Inspired by this phenomenon, in this paper, we propose the ranking-based mutation operators for the DE algorithm, where some of the parents in the mutation operators are proportionally selected according to their rankings in the current population. The higher ranking a parent obtains, the more opportunity it will be selected. In order to evaluate the influence of our proposed ranking-based mutation operators on DE, our approach is compared with the jDE algorithm, which is a highly competitive DE variant with self-adaptive parameters, with different mutation operators. In addition, the proposed ranking-based mutation operators are also integrated into other advanced DE variants to verify the effect on them. Experimental results indicate that our proposed ranking-based mutation operators are able to enhance the performance of the original DE algorithm and the advanced DE algorithms.

入藏号: WOS:000327647500045

PubMed ID: 23757516

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Automation & Control Systems; Computer Science, Artificial Intelligence; Computer Science, Cybernetics

ISSN: 2168-2267

eISSN: 2168-2275

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 321 条，共 381 条

标题: Two Novel Bi-Based Borate Photocatalysts: Crystal Structure, Electronic Structure, Photoelectrochemical Properties, and Photocatalytic Activity under Simulated Solar Light Irradiation

作者: Huang, HW (Huang, Hongwei); He, Y (He, Ying); Lin, ZS (Lin, Zheshuai); Kang, L (Kang, Lei); Zhang, YH (Zhang, Yihe)

来源出版物: JOURNAL OF PHYSICAL CHEMISTRY C 卷: 117 期: 44 页: 22986-22994 DOI: 10.1021/jp4084184 出版年: NOV 7 2013

Web of Science 核心合集中的 "被引频次": 270

被引频次合计: 273

摘要: Through the combination of Bi3+ and a large negative charge ion (BO3)(3-), two novel Bi-based borate photocatalysts Bi4B2O9 and Bi2O2[BO2(OH)] with layered structure have been successfully developed. For the first time, the borates were investigated as photocatalysts. They were synthesized by solid-state reaction and hydrothermal method, respectively, and further characterized by XRD, SEM, TEM, HRTEM, and DRS. Bi4B2O9 and Bi2O2[BO2(OH)] possess direct and indirect transition optical band gaps of 3.02 and 2.85 eV, respectively. Density functional calculations revealed that the valence band (VB) and conduction band (CB) of both borates were composed of hybridized states of the O 2p and Bi 6p or 6s orbitals, and a large dispersion was observed in the energy band of Bi2O2[BO2(OH)]. The photodecomposition experiments demonstrated that Bi4B2O9 and Bi2O2[BO2(OH)] can be used as effective photocatalysts under simulated solar irradiation, and Bi2O2[BO2(OH)] exhibits the high photocatalytic activity, which is 2.5 and 3.2 times compared with that of P25 and Bi2O2CO3, respectively. Moreover, the photocurrent conversion further confirmed that Bi4B2O9 and Bi2O2[BO2(OH)] were potential photofunctional materials. The layered structure with (Bi2O2)(2+) layer, hybridized and dispersion energy band, and large negative charge of (BO3)(3-) ion should be responsible for the high photocatalytic activity of Bi2O2[BO2(OH)].

入藏号: WOS:000326845400059

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary

ISSN: 1932-7447

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 322 条，共 381 条

标题: Tectonics of South China continent and its implications

作者: Zhang, GW (Zhang GuoWei); Guo, AL (Guo AnLin); Wang, YJ (Wang YueJun); Li, SZ (Li SanZhong); Dong, YP (Dong YunPeng); Liu, SF (Liu ShaoFeng); He, DF (He DengFa); Cheng, SY (Cheng ShunYou); Lu, RK (Lu RuKui); Yao, AP (Yao AnPing)

来源出版物: SCIENCE CHINA-EARTH SCIENCES 卷: 56 期: 11 页: 1804-1828 DOI: 10.1007/s11430-013-4679-1 出版年: NOV 2013

Web of Science 核心合集中的 "被引频次": 232

被引频次合计: 269

摘要: This paper aims at exploring the tectonic characteristics of the South China Continent (SCC) and extracting the universal tectonic rules from these characteristics, to help enrich the plate tectonic theory and better understand the continental dynamic system. For this purpose, here we conduct a multi-disciplinary investigation and combine it with the previous studies to reassess the tectonics and evolution of SCC and propose that the tectonic framework of the continent comprises two blocks, three types of tectonic units, four deformation systems, and four evolutionary stages with distinctive mechanism and tectonic characteristics since the Neoproterozoic. The four evolutionary stages are: (1) The amalgamation and break-up of the Neoproterozoic plates, typically the intracontinental rifting. (2) The early Paleozoic and Mesozoic intracontinental orogeny confined by plate tectonics, forming two composite tectonic domains. (3) The parallel operation of the Yangtze cratonization and intracontinental orogeny, and multi-phase reactivation of the Yangtze craton. (4) The association and differentiation evolution of plate tectonics and intracontinental tectonics, and the dynamic characteristics under the Meso-Cenozoic modern global plate tectonic regime.

入藏号: WOS:000326459500002

出版商: SCIENCE PRESS

出版商地址: 16 DONGHUANGCHENGGEN NORTH ST, BEIJING 100717, PEOPLES R CHINA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1674-7313

eISSN: 1869-1897

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 323 条，共 381 条

标题: Structural and Luminescence Properties of Yellow-Emitting NaScSi2O6:Eu2+ Phosphors: Eu2+ Site Preference Analysis and Generation of Red Emission by Codoping Mn2+ for White-Light-Emitting Diode Applications

作者: Xia, ZG (Xia, Zhiguo); Zhang, YY (Zhang, Yuanyuan); Molokeev, MS (Molokeev, Maxim S.); Atuchin, VV (Atuchin, Victor V.)

来源出版物: JOURNAL OF PHYSICAL CHEMISTRY C 卷: 117 期: 40 页: 20847-20854 DOI: 10.1021/jp4062225 出版年: OCT 10 2013

Web of Science 核心合集中的 "被引频次": 255

被引频次合计: 257

摘要: The structural properties of clinopyroxene NaScSi2O6 have been investigated using the X-ray powder diffraction refinement, and the luminescence properties of Eu2+ and Eu2+/Mer-activated NaScSi2O6 have been studied to explore the new materials for phosphor-converted white light ultraviolet light-emitting diodes (UV-LEDs). Eu2+ was introduced into the NaScSi2O6 host in the reducing atmosphere, and the preferred crystallographic positions of the Eu2+ ions were determined based on the different structural models of the NaScSi2O6 host. The as-obtained NaScSi2O6:Eu2+ phosphor shows greenish yellow emission with the broad-band peak at 533 nm, and efficient energy transfer (ET) takes place between Eu2+ and Mn2+ in NaScSi2O6, leading to a series of color-tunable phosphors emitting at 533 and 654 nm for the designed NaScSi2O6:Eu2+,Mn2+ phosphors under excitation at 365 nm. The ET mechanism of Eu2+ and Mn2+ has also been evaluated. We have demonstrated that NaScSi2O6:Eu2+ and NaScSi2O6:Eu2+,Mn2+ materials exhibit great potential to act as the effective phosphors for UV-LEDs.

入藏号: WOS:000326366800055

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary

ISSN: 1932-7447

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 324 条，共 381 条

标题: Orogen styles in the East African Orogen: A review of the Neoproterozoic to Cambrian tectonic evolution

作者: Fritz, H (Fritz, H.); Abdelsalam, M (Abdelsalam, M.); Ali, KA (Ali, K. A.); Bingen, B (Bingen, B.); Collins, AS (Collins, A. S.); Fowler, AR (Fowler, A. R.); Ghebreab, W (Ghebreab, W.); Hauzenberger, CA (Hauzenberger, C. A.); Johnson, PR (Johnson, P. R.); Kusky, TM (Kusky, T. M.); Macey, P (Macey, P.); Muhongo, S (Muhongo, S.); Stern, RJ (Stern, R. J.); Viola, G (Viola, G.)

来源出版物: JOURNAL OF AFRICAN EARTH SCIENCES 卷: 86 页: 65-106 DOI: 10.1016/j.jafrearsci.2013.06.004 出版年: OCT 2013

Web of Science 核心合集中的 "被引频次": 290

被引频次合计: 295

摘要: The East African Orogen, extending from southern Israel, Sinai and Jordan in the north to Mozambique and Madagascar in the south, is the worlds largest Neoproterozoic to Cambrian orogenic complex. It comprises a collage of individual oceanic domains and continental fragments between the Archean Sahara-Congo-Kalahari Cratons in the west and Neoproterozoic India in the east. Orogen consolidation was achieved during distinct phases of orogeny between similar to 850 and 550 Ma. The northern part of the orogen, the Arabian-Nubian Shield, is predominantly juvenile Neoproterozoic crust that formed in and adjacent to the Mozambique Ocean. The ocean closed during a protracted period of island-arc and microcontinent accretion between similar to 850 and 620 Ma. To the south of the Arabian Nubian Shield, the Eastern Granulite-Cabo Delgado Nappe Complex of southern Kenya, Tanzania and Mozambique was an extended crust that formed adjacent to theMozambique Ocean and experienced a similar to 650-620 Ma granulite-facies metamorphism. Completion of the nappe assembly around 620 Ma is defined as the East African Orogeny and was related to closure of the Mozambique Ocean. Oceans persisted after 620 Ma between East Antarctica, India, southern parts of the Congo-Tanzania-Bangweulu Cratons and the Zimbabwe-Kalahari Craton. They closed during the similar to 600-500 Ma Kuungan or Malagasy Orogeny, a tectonothermal event that affected large portions of southern Tanzania, Zambia, Malawi, Mozambique, Madagascar and Antarctica. The East African and Kuungan Orogenies were followed by phases of post-orogenic extension. Early similar to 600-550 Ma extension is recorded in the Arabian-Nubian Shield and the Eastern Granulite-Cabo Delgado Nappe Complex. Later similar to 550-480 Ma extension affected Mozambique and southern Madagascar. Both extension phases, although diachronous,are interpreted as the result of lithospheric delamination. Along the strike of the East African Orogen, different geodynamic settings resulted in the evolution of distinctly different orogen styles. The Arabian-Nubian Shield is an accretion-type orogen comprising a stack of thin-skinned nappes resulting from the oblique convergence of bounding plates. The Eastern Granulite-Cabo Delgado Nappe Complex is interpreted as a hot- to ultra-hot orogen that evolved from a formerly extended crust. Low viscosity lower crust resisted one-sided subduction, instead a sagduction-type orogen developed. The regions of Tanzania and Madagascar affected by the Kuungan Orogeny are considered a Himalayan-type orogen composed of partly doubly thickened crust. (C) 2013 The Authors. Published by Elsevier Ltd. All rights reserved.

入藏号: WOS:000324355800006

PubMed ID: 27065752

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1464-343X

eISSN: 1879-1956

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 325 条，共 381 条

标题: Spatial-temporal relationships of Mesozoic volcanic rocks in NE China: Constraints on tectonic overprinting and transformations between multiple tectonic regimes

作者: Xu, WL (Xu, Wen-Liang); Pei, FP (Pei, Fu-Ping); Wang, F (Wang, Feng); Meng, E (Meng, En); Ji, WQ (Ji, Wei-Qiang); Yang, DB (Yang, De-Bin); Wang, W (Wang, Wei)

来源出版物: JOURNAL OF ASIAN EARTH SCIENCES 卷: 74 特刊: SI 页: 167-193 DOI: 10.1016/j.jseaes.2013.04.003 出版年: SEP 25 2013

Web of Science 核心合集中的 "被引频次": 379

被引频次合计: 467

摘要: LA-ICP-MS zircon U-Pb ages and geochemical data are presented for the Mesozoic volcanic rocks in northeast China, with the aim of determining the tectonic settings of the volcanism and constraining the timing of the overprinting and transformations between the Paleo-Asian Ocean, Mongol-Okhotsk, and circum-Pacific tectonic regimes. The new ages, together with other available age data from the literature, indicate that Mesozoic volcanism in NE China can be subdivided into six episodes: Late Triassic (228-201 Ma), Early-Middle Jurassic (190-173 Ma), Middle-Late Jurassic (166-155 Ma), early Early Cretaceous (145-138 Ma), late Early Cretaceous (133-106 Ma), and Late Cretaceous (97-88 Ma). The Late Triassic volcanic rocks occur in the Lesser Xing'an-Zhangguangcai Ranges, where the volcanic rocks are bimodal, and in the eastern Heilongjiang-Jilin provinces where the volcanics are A-type rhyolites, implying that they formed in an extensional environment after the final closure of the Paleo-Asian Ocean. The Early-Middle Jurassic (190-173 Ma) volcanic rocks, both in the Erguna Massif and the eastern Heilongjiang-Jilin provinces, belong chemically to the calc-alkaline series, implying an active continental margin setting. The volcanics in the Erguna Massif are related to the subduction of the Mongol-Okhotsk oceanic plate beneath the Massif, and those in the eastern Jilin-Heilongjiang provinces are related to the subduction of the Paleo-Pacific Plate beneath the Eurasian continent. The coeval bimodal volcanic rocks in the Lesser Xing'an-Zhangguangcai Ranges were probably formed under an extensional environment similar to a backarc setting of double-direction subduction. Volcanic rocks of Middle-Late Jurassic (155-166 Ma) and early Early Cretaceous (145-138 Ma) age only occur in the Great Xing'an Range and the northern Hebei and western Liaoning provinces (limited to the west of the Songliao Basin), and they belong chemically to high-K calc-alkaline series and A-type rhyolites, respectively. Combined with the regional unconformity and thrust structures in the northern Hebei and western Liaoning provinces, we conclude that these volcanics formed during a collapse or delamination of a thickened continental crust related to the evolution of the Mongol-Okhotsk suture belt. The late Early Cretaceous volcanic rocks, widely distributed in NE China, belong chemically to a low- to medium-K calc-alkaline series in the eastern Heilongjiang-Jilin provinces (i.e., the Eurasian continental margin), and to a bimodal volcanic rock association within both the Songliao Basin and the Great Xing'an Range. The volcanics in the eastern Heilongjiang-Jilin provinces formed in an active continental margin setting related to the subduction of the Paleo-Pacific Plate beneath the Eurasian continent, and the bimodal volcanics formed under an extensional environment related either to a backarc setting or to delamination of a thickened crust, or both. Late Cretaceous volcanics, limited to the eastern Heilongjiang-Jilin provinces and the eastern North China Craton (NCC), consist of calc-alkaline rocks in the eastern Heilongjiang-Jilin provinces and alkaline basalts in the eastern NCC, suggesting that the former originated during subduction of the Paleo-Pacific Plate beneath the Eurasian continent, whereas the latter formed in an extensional environment similar to a backarc setting.

Taking all this into account, we conclude that (1) the transformation from the Paleo-Asian Ocean regime to the circum-Pacific tectonic regime happened during the Late Triassic to Early Jurassic; (2) the effect of the Mongol-Okhotsk suture belt on NE China was mainly in the Early Jurassic, Middle-Late Jurassic, and early Early Cretaceous; and (3) the late Early Cretaceous and Late Cretaceous volcanics can be attributed to the subduction of the Paleo-Pacific Plate beneath the Eurasian continent. (C) 2013 Elsevier Ltd. All rights reserved.

入藏号: WOS:000324663500014

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1367-9120

eISSN: 1878-5786

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 326 条，共 381 条

标题: China's regional energy and environmental efficiency: A DEA window analysis based dynamic evaluation

作者: Wang, K (Wang, Ke); Yu, SW (Yu, Shiwei); Zhang, W (Zhang, Wei)

来源出版物: MATHEMATICAL AND COMPUTER MODELLING 卷: 58 期: 5-6 页: 1117-1127 DOI: 10.1016/j.mcm.2011.11.067 出版年: SEP 2013

Web of Science 核心合集中的 "被引频次": 216

被引频次合计: 235

摘要: Data envelopment analysis (DEA) has recently become a popular approach in measuring the energy and environmental performance at the macro-economy level. A common limitation of several previous studies is that they ignored the undesirable outputs and did not consider the separation of inputs into energy resources and non-energy resources under the DEA framework. Thus, within a joint production framework of considering both desirable and undesirable outputs, as well as energy and non-energy inputs, this study analyzes China's regional total-factor energy and environmental efficiency. This paper utilizes improved DEA models to measure the energy and environmental efficiency of 29 administrative regions of China during the period of 2000-2008. In addition, the DEA window analysis technique is applied to measure the efficiency in cross-sectional and time-varying data. The empirical results show that the east area of China has the highest energy and environmental efficiency, while the efficiency of the west area is worst. All three areas of China have similar trends in the variation of efficiency and in general the energy and environmental efficiency of China slightly increased from 2000 to 2008. The regions of the east area have a more balanced development than the regions of the central area and west area according to energy and environmental efficiency. (C) 2011 Elsevier Ltd. All rights reserved.

入藏号: WOS:000321700400024

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Computer Science, Interdisciplinary Applications; Computer Science, Software Engineering; Mathematics, Applied

ISSN: 0895-7177

eISSN: 1872-9479

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 327 条，共 381 条

标题: Mechanisms of shale gas storage: Implications for shale gas exploration in China

作者: Hao, F (Hao, Fang); Zou, HY (Zou, Huayao); Lu, YC (Lu, Yongchao)

来源出版物: AAPG BULLETIN 卷: 97 期: 8 页: 1325-1346 DOI: 10.1306/02141312091 出版年: AUG 2013

Web of Science 核心合集中的 "被引频次": 258

被引频次合计: 327

摘要: This article reviews the mechanisms of shale gas storage and discusses the major risks or uncertainties for shale gas exploration in China. At a given temperature and pressure, the gas sorption capacities of organic-rich shales are primarily controlled by the organic matter richness but may be significantly influenced by the type and maturity of the organic matter, mineral composition (especially clay content), moisture content, pore volume and structure, resulting in different ratios of gas sorption capacity (GSC) to total organic carbon content for different shales. In laboratory experiments, the GSC of organic-rich shales increases with increasing pressure and decreases with increasing temperature. Under geologic conditions (assuming hydrostatic pressure gradient and constant thermal gradient), the GSC increases initially with depth due to the predominating effect of pressure, passes through a maximum, and then decreases because of the influence of increasing temperature at greater depth. This pattern of variation is quite similar to that observed for coals and is of great significance for understanding the changes in GSC of organic-rich shales over geologic time as a function of burial history. At an elevated temperature and pressure and with the presence of moisture, the gas sorption capacities of organic-rich shales are quite low. As a result, adsorption alone cannot protect sufficient gas for high-maturity organic-rich shales to be commercial gas reservoirs. Two models are proposed to predict the variation of GSC and total gas content over geologic time as a function of burial history. High contents of free gas in organic-rich shales can be preserved in relatively closed systems. Loss of free gas during postgeneration uplift and erosion may result in undersaturation (the total gas contents lower than the sorption capacity) and is the major risk for gas exploration in marine organic-rich shales in China.

入藏号: WOS:000322939300005

出版商: AMER ASSOC PETROLEUM GEOLOGIST

出版商地址: 1444 S BOULDER AVE, PO BOX 979, TULSA, OK 74119-3604 USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0149-1423

eISSN: 1558-9153

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 328 条，共 381 条

标题: Locating South China in Rodinia and Gondwana: A fragment of greater India lithosphere?

作者: Cawood, PA (Cawood, Peter A.); Wang, YJ (Wang, Yuejun); Xu, YJ (Xu, Yajun); Zhao, GC (Zhao, Guochun)

来源出版物: GEOLOGY 卷: 41 期: 8 页: 903-906 DOI: 10.1130/G34395.1 出版年: AUG 2013

Web of Science 核心合集中的 "被引频次": 304

被引频次合计: 330

摘要: From the formation of Rodinia at the end of the Mesoproterozoic to the commencement of Pangea breakup at the end of the Paleozoic, the South China craton first formed and then occupied a position adjacent to Western Australia and northern India. Early Neoproterozoic suprasubduction zone magmatic arc-backarc assemblages in the craton range in age from ca. 1000 Ma to 820 Ma and display a sequential northwest decrease in age. These relations suggest formation and closure of arc systems through southeast-directed subduction, resulting in progressive northwestward accretion onto the periphery of an already assembled Rodinia. Siliciclastic units within an early Paleozoic succession that transgresses across the craton were derived from the southeast and include detritus from beyond the current limits of the craton. Detrital zircon age spectra require an East Gondwana source and are very similar to the Tethyan Himalaya and younger Paleozoic successions from Western Australia, suggesting derivation from a common source and by inference accumulation in linked basins along the northern margin of Gondwana, a situation that continued until rifting and breakup of the craton in the late Paleozoic.

入藏号: WOS:000323274600022

出版商: GEOLOGICAL SOC AMER, INC

出版商地址: PO BOX 9140, BOULDER, CO 80301-9140 USA

Web of Science 类别: Geology

ISSN: 0091-7613

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 329 条，共 381 条

标题: Parameter extraction of solar cell models using repaired adaptive differential evolution

作者: Gong, WY (Gong, Wenyin); Cai, ZH (Cai, Zhihua)

来源出版物: SOLAR ENERGY 卷: 94 页: 209-220 DOI: 10.1016/j.solener.2013.05.007 出版年: AUG 2013

Web of Science 核心合集中的 "被引频次": 158

被引频次合计: 162

摘要: Parameter extraction of solar cell models plays an important role in the simulation and design calculation of photovoltaic (PV) systems. In this paper, in order to fast and accurately extract the solar cell parameters, an improved adaptive differential evolution with crossover rate repairing technique and ranking-based mutation is proposed. The proposed method is referred to as R-cr-IJADE, which is an improved version of JADE. In R-cr-IJADE, including the parameter adaptation presented in JADE, the crossover rate repairing technique and the ranking-based mutation are also synergized to improve the performance of JADE when solving the parameter extraction problems of solar cell models. In order to verify the performance of R-cr-IJADE, it is used to extract the parameters of different solar cell models, i.e., single diode, double diode, and PV module. Compared with other parameter extraction techniques, experimental results indicate the superiority of R-cr-IJADE in terms of the quality of final solutions, success rate, and convergence speed. In addition, the simulated data with the extracted parameters of R-cr-IJADE are in very good agreement with the experimental data in all cases. (C) 2013 Elsevier Ltd. All rights reserved.

入藏号: WOS:000322941100018

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Energy & Fuels

ISSN: 0038-092X

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 330 条，共 381 条

标题: Adsorption of tetracycline and chloramphenicol in aqueous solutions by bamboo charcoal: A batch and fixed-bed column study

作者: Liao, P (Liao, Peng); Zhan, ZY (Zhan, Zhengyi); Dai, J (Dai, Jing); Wu, XH (Wu, Xiaohui); Zhang, WB (Zhang, Wenbiao); Wang, K (Wang, Kun); Yuan, SH (Yuan, Songhu)

来源出版物: CHEMICAL ENGINEERING JOURNAL 卷: 228 页: 496-505 DOI: 10.1016/j.cej.2013.04.118 出版年: JUL 15 2013

Web of Science 核心合集中的 "被引频次": 173

被引频次合计: 187

摘要: Adsorption of two antibiotics, tetracycline (TC) and chloramphenicol (CAP), on a new porous carbonaceous adsorbent, bamboo charcoal (BC), is investigated in batch and fixed bed column experiments. Adsorption isotherms of TC and CAP obtained from batch experiments are better fitted by Freundlich and Dubinin-Radushkevich models compared with Langmuir model. In the fixed bed column experiments, lower bed height, higher flow rate and lower influent contaminant concentration lead to greater adsorption of TC and CAP on BC. A mass transfer model that incorporates both surface and intraparticle diffusion theory into the convection-dispersion equation (CDE) is developed to identify the key process controlling the rate of TC and CAP adsorption. The results demonstrate that the surface diffusion is the rate-limiting step for antibiotics adsorption onto BC, which is consistent with the results of traditional Adams-Bohart model. pi-pi Electro-donor-acceptor (EDA), cation-pi bond in conjunction with hydrogen bonding interaction are the main mechanisms for the adsorption of TC and CAP on BC, while the hydrophobic interaction and electrostatic interaction have minor contributions. (C) 2013 Elsevier B.V. All rights reserved.

入藏号: WOS:000326203500055

出版商: ELSEVIER SCIENCE SA

出版商地址: PO BOX 564, 1001 LAUSANNE, SWITZERLAND

Web of Science 类别: Engineering, Environmental; Engineering, Chemical

ISSN: 1385-8947

eISSN: 1873-3212

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 331 条，共 381 条

标题: Metallogeny of the North China Craton: Link with secular changes in the evolving Earth

作者: Zhai, MG (Zhai, Mingguo); Santosh, M (Santosh, M.)

来源出版物: GONDWANA RESEARCH 卷: 24 期: 1 特刊: SI 页: 275-297 DOI: 10.1016/j.gr.2013.02.007 出版年: JUL 2013

Web of Science 核心合集中的 "被引频次": 452

被引频次合计: 495

摘要: The North China Craton (NCC) has experienced a complex geological evolution since the early Precambrian, and carries important records of secular changes in tectonics and metallogeny. Here we synthesize the salient geological and tectonic features of the evolution and destruction of the NCC vis-a-vis major metallogenic events, and the formation of potential ore deposits. We identify a close relationship between the major geological events in the NCC and those reported elsewhere on the globe. We trace the records of a regular change in the pattern of metallogeny, mineral deposit character, spatial distribution and genetic mechanisms, which closely match the timing and styles of the major geological and tectonic events in this craton.

The NCC went through five major tectonic cycles: (1) Neoarchean crustal growth and stabilization, (2) Paleoproterozoic rifting-subduction-accretion-collision with imprints of the Great Oxidation Event (GOE), (3) Late Paleoproterozoic-Neoproterozoic multi-stage rifting, (4) Paleozoic orogenesis at the margins of the craton, and (5) Mesozoic extensional tectonics associated with lithospheric thinning and decratonization. Coinciding with these major geological events are five major metallogenic systems identified as follows: (I) an Archean BIF system, (2) Paleoproterozoic Cu-Pb-Zn and Mg-B systems, (3) a Mesoproterozoic REE-Fe-Pb-Zn system, (4) a Paleozoic orogenic Cu-Mo system, and (5) Mesozoic intracontinental Au and Ag-Pb-Zn and Mo systems. The ore-deposit types in each of these metallogenic systems show distinct characteristics and tectonic affinities. From Early Precambrian through Late Precambrian to Paleozoic and Mesozoic, the NCC records a transition from primitive- to modern-style plate tectonics. Evidence for imbricated oceanic plate stratigraphy in a subduction-accretion setting, and collisional orogenesis along at least three major zones of ocean closure are documented. Major transitions in tectonic style and surface environmental changes recorded in other parts of the world are also reflected in the geological history and metallogenic events in the NCC. Large-scale gold deposits formed through intraplate tectonics during the Mesozoic provide important insights into mantle dynamics and crust-mantle interaction associated with lithospheric thinning and craton destruction. The NCC provides one of the best examples for documenting secular changes in the geological history and metallogenic epochs of an evolving Earth. (C) 2013 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000319635700019

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 332 条，共 381 条

标题: Self-Assembled Fe2O3/Graphene Aerogel with High Lithium Storage Performance

作者: Xiao, L (Xiao, Li); Wu, DQ (Wu, Dongqing); Han, S (Han, Sheng); Huang, YS (Huang, Yanshan); Li, S (Li, Shuang); He, MZ (He, Mingzhong); Zhang, F (Zhang, Fan); Feng, XL (Feng, Xinliang)

来源出版物: ACS APPLIED MATERIALS & INTERFACES 卷: 5 期: 9 页: 3764-3769 DOI: 10.1021/am400387t 出版年: MAY 8 2013

Web of Science 核心合集中的 "被引频次": 235

被引频次合计: 239

摘要: In this study, graphene aerogel (GA)-supported Fe2O3 particles with three-dimensional (3D) architecture was prepared by a one-pot hydrothermal process. Fe2O3 particles were dispersed uniformly on the graphene sheets, and the resulting composites self-assembled into a 3D network via hydrothermal treatment. This strategy provides a facile and environmentally friendly method for the large-scale synthesis of Fe2O3/GAs without any additional reductant. As the anode material for lithium ion batteries, the Fe2O3/GAs in this study manifested an excellent reversible capacity of 995 mA h g(-1) after 50 cycles at a charge-discharge rate of 100 mA g(-1) and even delivered reversible capacity as high as 372 mA h g(-1) at a high rate of 5000 mA g(-1). The outstanding electrochemical performance of Fe2O3/GAs can be attributed to the synergistic interaction between uniformly dispersed Fe2O3 particles and graphene aerogel, in which a robust 3D framework of graphene provided highly conductive networks with a large surface area and short diffusion path length for the transport of lithium ions.

入藏号: WOS:000318839100039

PubMed ID: 23551107

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Nanoscience & Nanotechnology; Materials Science, Multidisciplinary

ISSN: 1944-8244

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 333 条，共 381 条

标题: Large-scale fluctuations in Precambrian atmospheric and oceanic oxygen levels from the record of U in shales

作者: Partin, CA (Partin, C. A.); Bekker, A (Bekker, A.); Planavsky, NJ (Planavsky, N. J.); Scott, CT (Scott, C. T.); Gill, BC (Gill, B. C.); Li, C (Li, C.); Podkovyrov, V (Podkovyrov, V.); Maslov, A (Maslov, A.); Konhauser, KO (Konhauser, K. O.); Lalonde, SV (Lalonde, S. V.); Love, GD (Love, G. D.); Poulton, SW (Poulton, S. W.); Lyons, TW (Lyons, T. W.)

来源出版物: EARTH AND PLANETARY SCIENCE LETTERS 卷: 369 页: 284-293 DOI: 10.1016/j.epsl.2013.03.031 出版年: MAY 2013

Web of Science 核心合集中的 "被引频次": 186

被引频次合计: 198

摘要: The atmosphere-ocean system experienced a progressive change from anoxic to more oxidizing conditions through time. This oxidation is traditionally envisaged to have occurred as two stepwise increases in atmospheric oxygen at the beginning and end of the Proterozoic Eon. Here, we present a study of the redox-sensitive element, uranium, in organic-rich shales to track the history of Earth's surface oxidation at an unprecedented temporal resolution. Fluctuations in the degree of uranium enrichment in organic-rich shales suggest that the initial rise of atmospheric oxygen similar to 2.4 billion yr ago was followed by a decline to less oxidizing conditions during the mid-Proterozoic. This redox state persisted for almost 1 billion yr, ending with a second oxygenation event in the latest Neoproterozoic. The U record tracks major fluctuations in surface oxygen level and challenges conventional models that suggest the Earth underwent a unidirectional rise in atmospheric oxygen during the Precambrian. (C) 2013 Elsevier B.V. All rights reserved.

入藏号: WOS:000320684500028

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0012-821X

eISSN: 1385-013X

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 334 条，共 381 条

标题: Tectonics of the North Qilian orogen, NW China

作者: Song, SG (Song, Shuguang); Niu, YL (Niu, Yaoling); Su, L (Su, Li); Xia, XH (Xia, Xiaohong)

来源出版物: GONDWANA RESEARCH 卷: 23 期: 4 特刊: SI 页: 1378-1401 DOI: 10.1016/j.gr.2012.02.004 出版年: MAY 2013

Web of Science 核心合集中的 "被引频次": 307

被引频次合计: 397

摘要: The Qilian Orogen at the northern margin of the Tibetan Plateau is a type suture zone that recorded a complete history from continental breakup to ocean basin evolution, and to the ultimate continental collision in the time period from the Neoproterozoic to the Paleozoic. The Qilian Ocean, often interpreted as representing the "Proto-Tethyan Ocean", may actually be an eastern branch of the worldwide "Iapetus Ocean" between the two continents of Baltica and Laurentia, opened at >= 710 Ma as a consequence of breakup of supercontinent Rodinia.

Initiation of the subduction in the Qilian Ocean probably occurred at similar to 520 Ma with the development of an Andean-type active continental margin represented by infant arc magmatism of similar to 517-490 Ma. In the beginning of Ordovician (similar to 490 Ma), part of the active margin was split from the continental Alashan block and the Andean-type active margin had thus evolved to western Pacific-type trench-arc-back-arc system represented by the MORB-like crust (i.e., SSZ-type ophiolite belt) formed in a back-arc basin setting in the time period of similar to 490-445 Ma. During this time, the subducting oceanic lithosphere underwent LT-HP metamorphism along a cold geotherm of similar to 6-7 degrees C/km.

The Qilian Ocean was closed at the end of the Ordovician (similar to 445 Ma). Continental blocks started to collide and the northern edge of the Qilian-Qaidam block was underthrust/dragged beneath the Alashan block by the downgoing oceanic lithosphere to depths of similar to 100-200 km at about 435-420 Ma. Intensive orogenic activities occurred in the late Silurian and early Devonian in response to the exhumation of the subducted crustal materials.

Briefly, the Qilian Orogen is conceptually a type example of the workings of plate tectonics from continental breakup to the development and evolution of an ocean basin, to the initiation of oceanic subduction and formation of arc and back-arc system, and to the final continental collision/subduction and exhumation. (C) 2012 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000318258500010

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 335 条，共 381 条

标题: Tectonic evolution of a composite collision orogen: An overview on the Qinling-Tongbai-Hong'an-Dabie-Sulu orogenic belt in central China

作者: Wu, YB (Wu, Yuan-Bao); Zheng, YF (Zheng, Yong-Fei)

来源出版物: GONDWANA RESEARCH 卷: 23 期: 4 特刊: SI 页: 1402-1428 DOI: 10.1016/j.gr.2012.09.007 出版年: MAY 2013

Web of Science 核心合集中的 "被引频次": 364

被引频次合计: 441

摘要: The formation of collisional orogens is a prominent feature in convergent plate margins. It is generally a complex process involving multistage tectonism of compression and extension due to continental subduction and collision. The Paleozoic convergence between the South China Block (SCB) and the North China Block (NCB) is associated with a series of tectonic processes such as oceanic subduction, terrane accretion and continental collision, resulting in the Qinling-Tongbai-Hong'an-Dabie-Sulu orogenic belt. While the arc-continent collision orogeny is significant during the Paleozoic in the Qinling-Tongbai-Hong'an orogens of central China, the continent-continent collision orogeny is prominent during the early Mesozoic in the Dabie-Sulu orogens of east-central China. This article presents an overview of regional geology, geochronology and geochemistry for the composite orogenic belt. The Qinling-Tongbai-Hong'an orogens exhibit the early Paleozoic HP-UHP metamorphism, the Carboniferous HP metamorphism and the Paleozoic arc-type magmatism, but the three tectonothermal events are absent in the Dabie-Sulu orogens. The Triassic UHP metamorphism is prominent in the Dabie-Sulu orogens, but it is absent in the Qinling-Tongbai orogens. The Hong'an orogen records both the HP and UHP metamorphism of Triassic age, and collided continental margins contain both the juvenile and ancient crustal rocks. So do in the Qinling and Tongbai orogens. In contrast, only ancient crustal rocks were involved in the UHP metamorphism in the Dabie-Sulu orogenic belt, without involvement of the juvenile arc crust. On the other hand, the deformed and low-grade metamorphosed accretionary wedge was developed on the passive continental margin during subduction in the late Permian to early Triassic along the northern margin of the Dabie-Sulu orogenic belt, and it was developed on the passive oceanic margin during subduction in the early Paleozoic along the northern margin of the Qinling orogen.

Three episodes of arc-continent collision are suggested to occur during the Paleozoic continental convergence between the SCB and NCB. The first episode of arc-continent collision is caused by northward subduction of the North Qinling unit beneath the Erlangping unit, resulting in UHP metamorphism at ca. 480-490 Ma and the accretion of the North Qinling unit to the NCB. The second episode of arc-continent collision is caused by northward subduction of the Prototethyan oceanic crust beneath an Andes-type continental arc, leading to granulite-facies metamorphism at ca. 420-430 Ma and the accretion of the Shangdan arc terrane to the NCB and reworking of the North Qinling, Erlangping and Kuanping units. The third episode of arc-continent collision is caused by northward subduction of the Paleotethyan oceanic crust, resulting in the HP edogite-facies metamorphism at ca. 310 Ma in the Hong'an orogen and low-P metamorphism in the Qinling-Tongbai orogens as well as crustal accretion to the NCB. The closure of backarc basins is also associated with the arc-continent collision processes, with the possible cause for granulite-facies metamorphism. The massive continental subduction of the SCB beneath the NCB took place in the Triassic with the final continent-continent collision and UHP metamorphism at ca. 225-240 Ma. Therefore, the Qinling-Tongbai-Hong'an-Dabie-Sulu orogenic belt records the development of plate tectonics from oceanic subduction and arc-type magmatism to arc-continent and continent-continent collision. (C) 2012 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000318258500011

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 336 条，共 381 条

标题: The origin and pre-Cenozoic evolution of the Tibetan Plateau

作者: Zhu, DC (Zhu, Di-Cheng); Zhao, ZD (Zhao, Zhi-Dan); Niu, YL (Niu, Yaoling); Dilek, Y (Dilek, Yildirim); Hou, ZQ (Hou, Zeng-Qian); Mo, XX (Mo, Xuan-Xue)

来源出版物: GONDWANA RESEARCH 卷: 23 期: 4 特刊: SI 页: 1429-1454 DOI: 10.1016/j.gr.2012.02.002 出版年: MAY 2013

Web of Science 核心合集中的 "被引频次": 694

被引频次合计: 858

摘要: Different hypotheses have been proposed for the origin and pre-Cenozoic evolution of the Tibetan Plateau as a result of several collision events between a series of Gondwana-derived terranes (e.g., Qiangtang, Lhasa and India) and Asian continent since the early Paleozoic. This paper reviews and reevaluates these hypotheses in light of new data from Tibet including (1) the distribution of major tectonic boundaries and suture zones, (2) basement rocks and their sedimentary covers, (3) magmatic suites, and (4) detrital zircon constraints from Paleozoic metasedimentary rocks. The Western Qiangtang, Amdo, and Tethyan Himalaya terranes have the Indian Gondwana origin, whereas the Lhasa Terrane shows an Australian Gondwana affinity. The Cambrian magmatic record in the Lhasa Terrane resulted from the subduction of the proto-Tethyan Ocean lithosphere beneath the Australian Gondwana. The newly identified late Devonian granitoids in the southern margin of the Lhasa Terrane may represent an extensional magmatic event associated with its rifting, which ultimately resulted in the opening of the Songdo Tethyan Ocean. The Lhasa-northern Australia collision at similar to 263 Ma was likely responsible for the initiation of a southward-dipping subduction of the Bangong-Nujiang Tethyan Oceanic lithosphere. The Yarlung-Zangbo Tethyan Ocean opened as a back-arc basin in the late Triassic, leading to the separation of the Lhasa Terrane from northern Australia. The subsequent northward subduction of the Yarlung-Zangbo Tethyan Ocean lithosphere beneath the Lhasa Terrane may have been triggered by the Qiangtang-Lhasa collision in the earliest Cretaceous. The mafic dike swarms (ca. 284 Ma) in the Western Qiangtang originated from the Panjal plume activity that resulted in continental rifting and its separation from the northern Indian continent. The subsequent collision of the Western Qiangtang with the Eastern Qiangtang in the middle Triassic was followed by slab breakoff that led to the exhumation of the Qiangtang metamorphic rocks. This collision may have caused the northward subduction initiation of the Bangong-Nujiang Ocean lithosphere beneath the Western Qiangtang. Collision-related coeval igneous rocks occurring on both sides of the suture zone and the within-plate basalt affinity of associated mafic lithologies suggest slab breakoff-induced magmatism in a continent-continent collision zone. This zone may be the site of net continental crust growth, as exemplified by the Tibetan Plateau. (C) 2012 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000318258500012

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 337 条，共 381 条

标题: Paleoproterozoic accretionary orogenesis in the North China Craton: A SHRIMP zircon study

作者: Santosh, M (Santosh, M.); Liu, DY (Liu, Dunyi); Shi, YR (Shi, Yuruo); Liu, SJ (Liu, S. J.)

来源出版物: PRECAMBRIAN RESEARCH 卷: 227 特刊: SI 页: 29-54 DOI: 10.1016/j.precamres.2011.11.004 出版年: APR 2013

Web of Science 核心合集中的 "被引频次": 193

被引频次合计: 200

摘要: The Inner Mongolia Suture Zone (IMSZ) and the Trans-North China Orogen (TNCO) incorporate the major Paleoproterozoic accretionary orogens in the North China Craton (NCC), with the Jiao-Liao-Ji Belt (JLJB) representing the third one. Here we investigate the Paleoproterozoic tectonics of the IMSZ and TNCO through zircon SHRIMP geochronology on a representative suite of rocks comprising metasediments and arc magmatic rocks. SHRIMP analysis of zircons with textures indicating extreme recrystallization under ultrahigh-temperature (UHT) conditions from the metapelites at Heling'er in the southern domain of the IMSZ reveals a single population with a weighted mean Pb-207/Pb-206 age of 1913 +/- 17 Ma. The zircons in another UHT granulite from this locality yield a weighted mean Pb-207/Pb-206 age of 1910 +/- 18 Ma. These data correlate with the ca. 1.92 Ga age reported from zircons in sapphirine-bearing UHT granulites further north and confirm the regional extent of the Paleoproterozoic UHT metamorphism within the IMSZ. Zircons in a charnockite from the southern margin of the Khondalite Belt fringing the UHT granulites in the IMSZ show two distinct age groups: an older population with a magmatic paragenesis and a weighted mean Pb-207/(206) Pb age of 1932 +/- 24 Ma, and a younger group of metamorphic zircons with an age of 1858 +/- 26 Ma. We also report zircon ages from charnockites in two localities around Xing'he in the Huangtuyao belt belonging to the Huai'an Complex within the westernmost domain of the TNCO at the junction with the IMSZ. The chamockite from first locality carries two distinct zircon populations with the older group yielding a weighted mean Pb-207/Pb-206 age of 2477 +/- 2 Ma and the younger population showing an age of 1807 +/- 38 Ma. The internal structure as revealed from CL images and the overall high Th/U values (up to 2.42) of the older zircons suggest their magmatic affinity, whereas the younger group with extremely low Th/U (0.02-0.09) is of metamorphic origin. Zircons from the charnockite in the second locality also define two distinct age clusters with a dominant older (magmatic) group having a weighted mean Pb-207/Pb-206 age of 2147 +/- 11 Ma and a minor younger group with an age of 1958 +/- 25 Ma. The range of ages from 2477 to 2147 Ma from magmatic zircons in the charnockites from the eastern periphery of the IMSZ, within the western margin of the TNCO, in combination with similar ages reported in recent studies from zircons in magmatic complexes within the IMSZ suggest a prolonged history of subduction-related arc magmatism and accretionary tectonics analogous to those in some of the Phanerozoic belts such as the Central Asian Orogenic Belt and the Western Pacific. Subsequent progressive collision and suturing of the continental blocks were accompanied by the exhumation of high-pressure (HP) and UHT metamorphic rocks. The available data from the IMSZ and TNCO suggest long-lived convergent margins associated with the southward subduction of the Yinshan Block and westward subduction of the Eastern Block in a double-sided subduction realm prior to the final amalgamation of the NCC and its incorporation within the Columbia supercontinent in the late Paleoproterozoic. (C) 2011 Elsevier B.V. All rights reserved.

入藏号: WOS:000316771800003

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0301-9268

eISSN: 1872-7433

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 338 条，共 381 条

标题: Regional allocation of CO2 emissions allowance over provinces in China by 2020

作者: Wang, K (Wang, Ke); Zhang, X (Zhang, Xian); Wei, YM (Wei, Yi-Ming); Yu, SW (Yu, Shiwei)

来源出版物: ENERGY POLICY 卷: 54 页: 214-229 DOI: 10.1016/j.enpol.2012.11.030 出版年: MAR 2013

Web of Science 核心合集中的 "被引频次": 152

被引频次合计: 160

摘要: The mitigation efforts of China are increasingly important for meeting global climate target since the rapid economic growth of China has led to an increasing share in the world's total CO2 emissions. This paper sets out to explore the approach for realizing China's national mitigation targets submitted to the UNFCCC as part of the Copenhagen Accord; that is, to reduce the intensity of CO2 emissions per unit of GDP by 40-45% by 2020, as well as reducing the energy intensity and increasing the share of non-fossil fuel consumption, through regional allocation of emission allowance over China's provinces. Since the realization of China's mitigation target essentially represents a total amount emission allowance allocation problem, an improved zero sum gains data envelopment analysis optimization model, which could deal with the constant total amount resources allocation, is proposed in this study. By utilizing this model and based on several scenarios of China's economic growth, CO2 emissions, and energy consumption, a new efficient emission allowance allocation scheme on provincial level for China by 2020 is proposed. The allocation results indicate that different provinces have to shoulder different mitigation burdens in terms of emission intensity reduction, energy intensity reduction, and share of non-fossil fuels increase. (c) 2012 Elsevier Ltd. All rights reserved.

入藏号: WOS:000316154500023

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Economics; Energy & Fuels; Environmental Sciences; Environmental Studies

ISSN: 0301-4215

eISSN: 1873-6777

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 339 条，共 381 条

标题: Major types and time-space distribution of Mesozoic ore deposits in South China and their geodynamic settings

作者: Mao, JW (Mao Jingwen); Cheng, YB (Cheng Yanbo); Chen, MH (Chen Maohong); Pirajno, F (Pirajno, Franco)

来源出版物: MINERALIUM DEPOSITA 卷: 48 期: 3 页: 267-294 DOI: 10.1007/s00126-012-0446-z 出版年: MAR 2013

Web of Science 核心合集中的 "被引频次": 393

被引频次合计: 462

摘要: The ore deposits of the Mesozoic age in South China can be divided into three groups, each with different metal associations and spatial distributions and each related to major magmatic events. The first event occurred in the Late Triassic (230-210 Ma), the second in the Mid-Late Jurassic (170-150 Ma), and the third in the Early-Mid Cretaceous (120-80 Ma). The Late Triassic magmatic event and associated mineralization is characterized by peraluminous granite-related W-Sn-Nb-Ta mineral deposits. The Triassic ore deposits are considerably disturbed or overprinted by the later Jurassic and Cretaceous tectono-thermal episodes. The Mid-Late Jurassic magmatic and mineralization events consist of 170-160 Ma porphyry-skarn Cu and Pb-Zn-Ag vein deposits associated with I-type granites and 160-150 Ma metaluminous granite-related polymetallic W-Sn deposits. The Late Jurassic metaluminous granite-related W-Sn deposits occur in a NE-trending cluster in the interior of South China, such as in the Nanling area. In the Early-Mid Cretaceous, from about 120 to 80 Ma, but peaking at 100-90 Ma, subvolcanic-related Fe deposits developed and I-type calc-alkaline granitic intrusions formed porphyry Cu-Mo and porphyry-epithermal Cu-Au-Ag mineral systems, whereas S-type peraluminous and/or metaluminous granitic intrusions formed polymetallic Sn deposits. These Cretaceous mineral deposits cluster in distinct areas and are controlled by pull-apart basins along the South China continental margin. Based on mineral assemblage, age, and space-time distribution of these mineral systems, integrated with regional geological data and field observations, we suggest that the three magmatic-mineralization episodes are the result of distinct geodynamic regimes. The Triassic peraluminous granites and associated W-Sn-Nb-Ta mineralization formed during post-collisional processes involving the South China Block, the North China Craton, and the Indo-China Block, mostly along the Dabie-Sulu and Songma sutures. Jurassic events were initially related to the shallow oblique subduction of the Izanagi plate beneath the Eurasian continent at about 175 Ma, but I-type granitoids with porphyry Cu and vein-type Pb-Zn-Ag deposits only began to form as a result of the breakup of the subducted plate at 170-160 Ma, along the NNE-trending Qinzhou-Hangzhou belt (also referred to as Qin-Hang or Shi-Hang belt), which is the Neoproterozoic suture that amalgamates the Yangtze Craton and Cathaysia Block. A large subduction slab window is assumed to have formed in the Nanling and adjacent areas in the interior of South China, triggering the uprise of asthenospheric mantle into the upper crust and leading to the emplacement of metaluminous granitic magma and associated polymetallic W-Sn mineralization. A relatively tectonically quiet period followed between 150 and 135 Ma in South China. From 135 Ma onward, the angle of convergence of the Izanagi plate changed from oblique to parallel to the coastline, resulting in continental extensional tectonics and reactivation of regional-scale NE-trending faults, such as the Tan-Lu fault. This widespread extension also promoted the development of NE-trending pull-apart basins and metamorphic core complexes, accompanied by volcanism and the formation of epithermal Cu-Au deposits, granite-related polymetallic Sn-(W) deposits and hydrothermal U deposits between 120 and 80 Ma (with a peak activity at 100-90 Ma).

入藏号: WOS:000315376300001

出版商: SPRINGER

出版商地址: 233 SPRING ST, NEW YORK, NY 10013 USA

Web of Science 类别: Geochemistry & Geophysics; Mineralogy

ISSN: 0026-4598

eISSN: 1432-1866

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 340 条，共 381 条

标题: G-Hadoop: MapReduce across distributed data centers for data-intensive computing

作者: Wang, LZ (Wang, Lizhe); Tao, J (Tao, Jie); Ranjan, R (Ranjan, Rajiv); Marten, H (Marten, Holger); Streit, A (Streit, Achim); Chen, JY (Chen, Jingying); Chen, D (Chen, Dan)

来源出版物: FUTURE GENERATION COMPUTER SYSTEMS-THE INTERNATIONAL JOURNAL OF ESCIENCE 卷: 29 期: 3 页: 739-750 DOI: 10.1016/j.future.2012.09.001 出版年: MAR 2013

Web of Science 核心合集中的 "被引频次": 211

被引频次合计: 218

摘要: Recently, the computational requirements for large-scale data-intensive analysis of scientific data have grown significantly. In High Energy Physics (HEP) for example, the Large Hadron Collider (LHC) produced 13 petabytes of data in 2010. This huge amount of data is processed on more than 140 computing centers distributed across 34 countries. The MapReduce paradigm has emerged as a highly successful programming model for large-scale data-intensive computing applications. However, current MapReduce implementations are developed to operate on single cluster environments and cannot be leveraged for large-scale distributed data processing across multiple clusters. On the other hand, workflow systems are used for distributed data processing across data centers. It has been reported that the workflow paradigm has some limitations for distributed data processing, such as reliability and efficiency. In this paper, we present the design and implementation of G-Hadoop, a MapReduce framework that aims to enable large-scale distributed computing across multiple clusters. (C) 2012 Elsevier B.V. All rights reserved.

入藏号: WOS:000313611500007

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Computer Science, Theory & Methods

ISSN: 0167-739X

eISSN: 1872-7115

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 341 条，共 381 条

标题: Diversity enhanced particle swarm optimization with neighborhood search

作者: Wang, H (Wang, Hui); Sun, H (Sun, Hui); Li, CH (Li, Changhe); Rahnamayan, S (Rahnamayan, Shahryar); Pan, JS (Pan, Jeng-shyang)

来源出版物: INFORMATION SCIENCES 卷: 223 页: 119-135 DOI: 10.1016/j.ins.2012.10.012 出版年: FEB 20 2013

Web of Science 核心合集中的 "被引频次": 248

被引频次合计: 268

摘要: Particle swarm optimization (PSO) has shown an effective performance for solving variant benchmark and real-world optimization problems. However, it suffers from premature convergence because of quick losing of diversity. In order to enhance its performance, this paper proposes a hybrid PSO algorithm, called DNSPSO, which employs a diversity enhancing mechanism and neighborhood search strategies to achieve a trade-off between exploration and exploitation abilities. A comprehensive experimental study is conducted on a set of benchmark functions, including rotated multimodal and shifted high-dimensional problems. Comparison results show that DNSPSO obtains a promising performance on the majority of the test problems. (C) 2012 Elsevier Inc. All rights reserved.

入藏号: WOS:000312915400007

出版商: ELSEVIER SCIENCE INC

出版商地址: STE 800, 230 PARK AVE, NEW YORK, NY 10169 USA

Web of Science 类别: Computer Science, Information Systems

ISSN: 0020-0255

eISSN: 1872-6291

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 342 条，共 381 条

标题: The link between reduced porphyry copper deposits and oxidized magmas

作者: Sun, WD (Sun, Wei-dong); Liang, HY (Liang, Hua-ying); Ling, MX (Ling, Ming-xing); Zhan, MZ (Zhan, Mei-zhen); Ding, X (Ding, Xing); Zhang, H (Zhang, Hong); Yang, XY (Yang, Xiao-yong); Li, YL (Li, Yi-liang); Ireland, TR (Ireland, Trevor R.); Wei, QR (Wei, Qi-rong); Fan, WM (Fan, Wei-ming)

来源出版物: GEOCHIMICA ET COSMOCHIMICA ACTA 卷: 103 页: 263-275 DOI: 10.1016/j.gca.2012.10.054 出版年: FEB 15 2013

Web of Science 核心合集中的 "被引频次": 241

被引频次合计: 278

摘要: Porphyry copper deposits account for more than 80% of the world's total Cu resources. However, the formation mechanism and controlling factors of porphyry copper deposits remain obscure. Previous studies have revealed that porphyry copper deposits are usually associated with oxidized, calc-alkalic, adakitic shallow intrusive rocks. Here we show that hematite-magnetite intergrowths are commonly found in porphyry copper deposits, suggesting high and fluctuating oxygen fugacity (fO(2)). Oxidation promotes the destruction of sulfides in the magma source, and thereby increases initial chalcophile element concentrations. Sulfide remains undersaturated during the evolution of oxidized sulfur-enriched magmas where sulfate is the dominant sulfur species, leading to high chalcophile element concentrations in evolved magmas. The final porphyry copper mineralization is controlled by sulfate reduction, which starts with magnetite crystallization, accompanied by decreasing pH and correspondingly increasing fO(2). Hematite forms once sulfate reduction lowers the pH sufficiently and the fO(2) reaches the hematite-magnetite oxygen fugacity buffer, which in turn increases the pH for a given fO(2). The oxidation of ferrous iron during the crystallization of magnetite and hematite is the causal process of sulfate reduction and consequent mineralization. Therefore, the initial pH and fO(2) ranges of porphyries favorable for porphyry copper mineralization are defined by the hematite-magnetite oxygen fugacity buffer and SO42--HS--S-3(-) reaction lines. Adakitic rocks have higher initial contents of copper, sulfur and iron than normal arc rocks, and thus are the best candidates for porphyry copper deposits. These provide a plausible explanation for the formation of copper porphyry deposits. The hematite-magnetite intergrowth marks the upper limits of fO(2) favorable for the mineralization, and thus may be a powerful tool for future prospecting of large porphyry copper deposits. (c) 2012 Elsevier Ltd. All rights reserved.

入藏号: WOS:000313688600017

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0016-7037

eISSN: 1872-9533

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 343 条，共 381 条

标题: Pore structure and its impact on CH4 adsorption capacity and flow capability of bituminous and subbituminous coals from Northeast China

作者: Cai, YD (Cai, Yidong); Liu, DM (Liu, Dameng); Pan, ZJ (Pan, Zhejun); Yao, YB (Yao, Yanbin); Li, JQ (Li, Junqian); Qiu, YK (Qiu, Yongkai)

来源出版物: FUEL 卷: 103 页: 258-268 DOI: 10.1016/j.fuel.2012.06.055 出版年: JAN 2013

Web of Science 核心合集中的 "被引频次": 349

被引频次合计: 378

摘要: Adsorption-pore (pore size less than 100 nm) and seepage-pore (pore size greater than 100 nm) structures have great effects on gas adsorption/diffusion and gas flow in coal seam, respectively. Pore properties, including porosity, size/volume distribution, volumes, surface fractals, specific surface area, and connectivity, for four coals from Northeast China were acquired through mercury porosimetry, N-2 adsorption at 77 K, small angle X-ray scattering (SAXS) and their relationships with CH4 adsorption capacity and permeability are investigated. The roughness of pore surface was analyzed with surface fractal dimensions. Obtained values of fractal dimensions from mercury porosimetry and N-2 adsorption at 77 K were comparable with values determined by SAXS measurement. The surface fractals results show that the more irregular surface, the more inhomogeneous pore structures is, meaning more surface area and then stronger adsorption capability, especially for the micropores with sizes in the range of 2-10 nm and the mesopores. Moreover, with the data of petrographic, proximate and ultimate analyses, the ratio of C/H, moisture content, ash yield also have great effects on CH4 adsorption capacity of coals. For bituminous and subbituminous coals, macropores have significant impacts on gas flow. The coals with high contents of macroporosity generally have good gas flow capability. Therefore, they may have significant implications for coalbed methane (CBM) exploitation. (C) 2012 Elsevier Ltd. All rights reserved.

入藏号: WOS:000311932200035

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0016-2361

eISSN: 1873-7153

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 344 条，共 381 条

标题: Pre-Rodinia supercontinent Nuna shaping up: A global synthesis with new paleomagnetic results from North China

作者: Zhang, SH (Zhang, Shihong); Li, ZX (Li, Zheng-Xiang); Evans, DAD (Evans, David A. D.); Wu, HC (Wu, Huaichun); Li, HY (Li, Haiyan); Dong, J (Dong, Jin)

来源出版物: EARTH AND PLANETARY SCIENCE LETTERS 卷: 353 页: 145-155 DOI: 10.1016/j.epsl.2012.07.034 出版年: NOV 1 2012

Web of Science 核心合集中的 "被引频次": 282

被引频次合计: 303

摘要: The existence of a pre-Rodinia Precambrian supercontinent, variously called Nuna or Columbia, has been widely speculated in the past decade, but the precise timing of its existence and its configuration have been uncertain due to the lack of unequivocal paleomagnetic and geological constraints. Here we report high-quality paleomagnetic results from the well dated similar to 1780 Ma Xiong'er Group in southern North China Block (NCB). A total of 110 paleomagnetic samples from 14 sites were collected and subjected to stepwise thermal demagnetization. After removing a low temperature component (CL) of viscous magnetic remanence acquired in recent geomagnetic field, a high temperature component (CH), carried by hematite and magnetite in redbeds and volcanic samples, has been isolated. It gives a mean direction of (D=18.4 degrees, I=-3.7 degrees, alpha(95)=7.6 degrees, N=14) after bedding correction, and a corresponding paleomagnetic pole at 50.2 degrees N, 263.0 degrees E (A(95)=4.5 degrees). The CH passed a reversal test and was interpreted as a primary remanence. This new pole plus three other high-quality poles from the NCB that have been more precisely dated at 1769 +/- 3 Ma, 1560-1440 Ma and 1437 +/- 21 Ma define a 1780-1440 Ma apparent polar wander path (APWP) for the NCB. This, together with an update of global high quality paleomagnetic dataset, allows us to demonstrate that the pre-Rodinia supercontinent Nuna likely existed at least between similar to 1780 Ma and similar to 1400 Ma. Our paleomagnetism-based global reconstruction, for the first time, quantitatively assembles all major cratons together; it encompasses previously proposed regional links including the SAMBA connection between Baltica, Amazonia and Western Africa (Johansson, 2009), connections between Laurentia, Baltica and Siberia at the core of Nuna (Evans and Mitchell, 2011), the proto-SWEAT connection between Laurentia, East Antarctica and Australian blocks (Payne et al., 2009), and the NCB-India connection (Zhao et al., 2011). (C) 2012 Elsevier B.V. All rights reserved.

入藏号: WOS:000311014300015

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0012-821X

eISSN: 1385-013X

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 345 条，共 381 条

标题: Lethally Hot Temperatures During the Early Triassic Greenhouse

作者: Sun, YD (Sun, Yadong); Joachimski, MM (Joachimski, Michael M.); Wignall, PB (Wignall, Paul B.); Yan, CB (Yan, Chunbo); Chen, YL (Chen, Yanlong); Jiang, HS (Jiang, Haishui); Wang, LN (Wang, Lina); Lai, XL (Lai, Xulong)

来源出版物: SCIENCE 卷: 338 期: 6105 页: 366-370 DOI: 10.1126/science.1224126 出版年: OCT 19 2012

Web of Science 核心合集中的 "被引频次": 515

被引频次合计: 563

摘要: Global warming is widely regarded to have played a contributing role in numerous past biotic crises. Here, we show that the end-Permian mass extinction coincided with a rapid temperature rise to exceptionally high values in the Early Triassic that were inimical to life in equatorial latitudes and suppressed ecosystem recovery. This was manifested in the loss of calcareous algae, the near-absence of fish in equatorial Tethys, and the dominance of small taxa of invertebrates during the thermal maxima. High temperatures drove most Early Triassic plants and animals out of equatorial terrestrial ecosystems and probably were a major cause of the end-Smithian crisis.

入藏号: WOS:000309955800037

PubMed ID: 23087244

出版商: AMER ASSOC ADVANCEMENT SCIENCE

出版商地址: 1200 NEW YORK AVE, NW, WASHINGTON, DC 20005 USA

Web of Science 类别: Multidisciplinary Sciences

ISSN: 0036-8075

eISSN: 1095-9203

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 346 条，共 381 条

标题: Cambrian bimodal volcanism in the Lhasa Terrane, southern Tibet: Record of an early Paleozoic Andean-type magmatic arc in the Australian proto-Tethyan margin

作者: Zhu, DC (Zhu, Di-Cheng); Zhao, ZD (Zhao, Zhi-Dan); Niu, YL (Niu, Yaoling); Dilek, Y (Dilek, Yildirim); Wang, Q (Wang, Qing); Ji, WH (Ji, Wen-Hua); Dong, GC (Dong, Guo-Chen); Sui, QL (Sui, Qing-Lin); Liu, YS (Liu, Yong-Sheng); Yuan, HL (Yuan, Hong-Lin); Mo, XX (Mo, Xuan-Xue)

来源出版物: CHEMICAL GEOLOGY 卷: 328 特刊: SI 页: 290-308 DOI: 10.1016/j.chemgeo.2011.12.024 出版年: OCT 18 2012

Web of Science 核心合集中的 "被引频次": 212

被引频次合计: 255

摘要: This paper reports new zircon LA-ICP-MS U-Pb age and Hf-isotope, whole-rock major and trace element, and Sr-Nd isotope data from Cambrian metavolcanic rocks in the central Lhasa subterrane of southern Tibet. These rocks form a bimodal volcanic suite consisting mainly of silicic metavolcanic rocks with subordinate metabasalts. Five silicic metavolcanic samples dated at ca. 492 Ma and one metabasalt sample yielding a near-concordant Pb-206/U-238 age of 492 +/- 4 Ma indicate that mafic and silicic eruptions were contemporaneous. The metabasalts are mostly high-K calc-alkaline, enriched in Th, U, and light rare earth elements (LREEs), and depleted in Nb, Ta, Ti, Zr, and Hf, geochemically resembling the Andean arc basalts. The silicic metavolcanic rocks are high-K calc-alkaline and low in Nb and Zr. The metabasaltic rocks have negative whole-rock epsilon(Nd)(t) values (-4.7 to -3.5) and varying zircon epsilon(Hf)(t) values (-0.7 to +7.5), differing significantly from those of the silicic metavolcanic rocks, which yield negative whole-rock epsilon(Nd)(t) values of -8.4 to -7.2 and varying zircon epsilon(Hf)(t) values (-13.9 to -4.6). The metabasaltic rocks are interpreted as resulting from partial melting of an enriched lithospheric mantle source that was metasomatized by subduction-related components, whereas the silicic metavolcanic rocks were derived from basaltic melt-induced anatexis of the ancient Lhasa basement with inherited mantle melt signatures. The Western Qiangtang-Amdo-Tethyan Himalaya situated in the Indian proto-Tethyan margin and the Lhasa and other possible microcontinents or terranes (e.g., Gongshan, Baoshan, Tengchong, Burma, and Sibumasu) paleographically located in the Australian proto-Tethyan margin represent an early Paleozoic Andean-type magmatic arc facing the proto-Tethyan Ocean. The emplacement of the bimodal volcanic rocks and the development of the Cambro-Ordovician angular unconformity in the central Lhasa subterrane can be attributed to slab break-off of the proto-Tethyan Ocean lithosphere following the collisional accretion of microcontinents or terranes located outboard of the magmatic arc (possibly Eastern Qiangtang and South China). (C) 2012 Elsevier B.V. All rights reserved.

入藏号: WOS:000310124900018

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0009-2541

eISSN: 1872-6836

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 347 条，共 381 条

标题: Age constraint on Burmese amber based on U-Pb dating of zircons

作者: Shi, GH (Shi, Guanghai); Grimaldi, DA (Grimaldi, David A.); Harlow, GE (Harlow, George E.); Wang, J (Wang, Jing); Wang, J (Wang, Jun); Yang, MC (Yang, Mengchu); Lei, WY (Lei, Weiyan); Li, QL (Li, Qiuli); Li, XH (Li, Xianhua)

来源出版物: CRETACEOUS RESEARCH 卷: 37 页: 155-163 DOI: 10.1016/j.cretres.2012.03.014 出版年: OCT 2012

Web of Science 核心合集中的 "被引频次": 744

被引频次合计: 841

摘要: Amber from northern Myanmar has been commercially exploited for millennia, and it also preserves the most diverse palaeobiota among the worlds' seven major deposits of Cretaceous amber. Recent estimated ages vary from Albian to Cenomanian, based on palynology, an arnmonoid, and Mesozoic insect taxa preserved within the amber. The burmite-bearing rock is sedimentary and consists mainly of rounded lithic clasts (0.03 similar to 0.15 mm in diameter), with minor fragments of quartz and feldspar. Among the lithic clasts are mostly volcanic rocks. Zircons separated from the amber matrix form two groups: Group-1 zircons are overgrown and have variable CL patterns, experienced slight geological disturbances after they formed, and their Ion microprobe Pb-206/U-238 ages fall into a very narrow range of similar to 102 Ma- similar to 108 Ma; Group-II zircons are typical magmatic ones with rhythmically flat zones, inferred to be derived from volcanic rock clasts, and yielded a concordia Pb-206/U-238 age of 98.79 +/- 0.62 Ma. The dating on Group-1 zircons is only for their interiors, thus hiding what age excursion might come from the overgrowth. Considering the nearshore marine environment and 1-m thickness of the burmite-bearing sediments, and the syn- and post-eruption deposition of volcanic clasts, the age of 98.79 +/- 0.62 Ma therefore can be used as a maximum limit for the burmite (either at or after), establishing an earliest Cenomanian age for the fossilized inclusions. The age also indicates that volcanic eruption occurred at 98.79 +/- 0.62 Ma in the vicinity of the Hukawng Valley. (C) 2012 Elsevier Ltd. All rights reserved.

入藏号: WOS:000306159800011

出版商: ACADEMIC PRESS LTD- ELSEVIER SCIENCE LTD

出版商地址: 24-28 OVAL RD, LONDON NW1 7DX, ENGLAND

Web of Science 类别: Geology; Paleontology

ISSN: 0195-6671

eISSN: 1095-998X

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 348 条，共 381 条

标题: Ocean oxygenation in the wake of the Marinoan glaciation

作者: Sahoo, SK (Sahoo, Swapan K.); Planavsky, NJ (Planavsky, Noah J.); Kendall, B (Kendall, Brian); Wang, XQ (Wang, Xinqiang); Shi, XY (Shi, Xiaoying); Scott, C (Scott, Clint); Anbar, AD (Anbar, Ariel D.); Lyons, TW (Lyons, Timothy W.); Jiang, GQ (Jiang, Ganqing)

来源出版物: NATURE 卷: 489 期: 7417 页: 546-549 DOI: 10.1038/nature11445 出版年: SEP 27 2012

Web of Science 核心合集中的 "被引频次": 264

被引频次合计: 282

摘要: Metazoans are likely to have their roots in the Cryogenian period(1-3), but there is a marked increase in the appearance of novel animal and algae fossils shortly after the termination of the late Cryogenian (Marinoan) glaciation about 635 million years ago(4-6). It has been suggested that an oxygenation event in the wake of the severe Marinoan glaciation was the driving factor behind this early diversification of metazoans and the shift in ecosystem complexity(7,8). But there is little evidence for an increase in oceanic or atmospheric oxygen following the Marinoan glaciation, or for a direct link between early animal evolution and redox conditions in general(9). Models linking trends in early biological evolution to shifts in Earth system processes thus remain controversial(10). Here we report geochemical data from early Ediacaran organic-rich black shales (similar to 635-630 million years old) of the basal Doushantuo Formation in South China. High enrichments of molybdenum and vanadium and low pyrite sulphur isotope values (Delta S-34 values >= 65 per mil) in these shales record expansion of the oceanic inventory of redox-sensitive metals and the growth of the marine sulphate reservoir in response to a widely oxygenated ocean. The data provide evidence for an early Ediacaran oxygenation event, which pre-dates the previous estimates for post-Marinoan oxygenation(11-13) by more than 50 million years. Our findings seem to support a link between the most severe glaciations in Earth's history, the oxygenation of the Earth's surface environments, and the earliest diversification of animals.

入藏号: WOS:000309167100046

PubMed ID: 23018964

出版商: NATURE PUBLISHING GROUP

出版商地址: MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

Web of Science 类别: Multidisciplinary Sciences

ISSN: 0028-0836

eISSN: 1476-4687

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 349 条，共 381 条

标题: The Indus-Yarlung Zangbo ophiolites from Nanga Parbat to Namche Barwa syntaxes, southern Tibet: First synthesis of petrology, geochemistry, and geochronology with incidences on geodynamic reconstructions of Neo-Tethys

作者: Hebert, R (Hebert, R.); Bezard, R (Bezard, R.); Guilmette, C (Guilmette, C.); Dostal, J (Dostal, J.); Wang, CS (Wang, C. S.); Liu, ZF (Liu, Z. F.)

来源出版物: GONDWANA RESEARCH 卷: 22 期: 2 特刊: SI 页: 377-397 DOI: 10.1016/j.gr.2011.10.013 出版年: SEP 2012

Web of Science 核心合集中的 "被引频次": 240

被引频次合计: 269

摘要: The purpose of this first synthesis is to summarize findings on the Yarlung Zangbo Suture Zone (YZSZ) ophiolites and discuss still remaining problems. The YZSZ studied for almost 30 years and is the youngest of the sutures recognized on Tibet Plateau. It is now acknowledged that the YZSZ is a complex assemblage of sedimentary, metamorphic and igneous rocks created during and shortly after the collision between India and Eurasia. The ages of the various lithologies span a time interval from the Jurassic to the Middle Miocene, with some Permian and Devonian exotic blocks from melange zone. The YZSZ is characterized by ophiolitic complexes and ophiolitic melange. The ophiolites are of two types: non dismembered and dismembered sections. The non disturbed sections, although tectonically reworked, are observed along the segment from Dazhuqu to Jiding in Xigaze area and Spontang ophiolite. The dismembered sequences are found in various locations such as Nidar, Kiogar, Jungbwa, Saga, Sangsang, Xigugabu, and Luobusa. The incomplete stratigraphic log could be connected to intraoceanic or orogenetic origins. The ophiolites are distributed into two groups of ages: the Luobusa. Zedang and Kiogar sequences being Jurassic-Lower Cretaceous whereas all other sequences are of Lower Cretaceous age. Compilation of geochronological data suggest that some ophiolite sequences might have evolved for over more than 70 My from their initial genesis to obduction which occurred around 70-90 My ago. Ophiolites differ in terms of petrological and geochemical aspects however, they were all generated in suprasubduction zone and more specifically in arc (few fore-arc) and back-arc settings. Synthesis of more than 700 geochemical analyses show variable mixing of components from N-MORB-type to IAT-CAB and to OIB end-members. The Jurassic ophiolites show the maximum of arc component while the Lower Cretaceous ones show little to strong mixing. In addition, most ophiolites were created in short lived (30 My) basins and generated close to the Eurasiatic continental margin. We propose that Ladakh-Tibet ophiolites were generated in a suprasubduction context similar to Mariana arc, inter-arc and back-arc or Tonga-Lau system. The variable arc signature of these ophiolites is directly related to their initial position within the suprasubduction system. (c) 2011 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000307602000003

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 350 条，共 381 条

标题: Tunable Blue-Green Color Emission and Energy Transfer of Ca2Al3O6F:Ce3+,Tb3+ Phosphors for Near-UV White LEDs

作者: Xia, ZG (Xia, Zhiguo); Liu, RS (Liu, Ru-Shi)

来源出版物: JOURNAL OF PHYSICAL CHEMISTRY C 卷: 116 期: 29 页: 15604-15609 DOI: 10.1021/jp304722z 出版年: JUL 26 2012

Web of Science 核心合集中的 "被引频次": 375

被引频次合计: 384

摘要: A series of new luminescent emission-tunable phosphors Ca2Al3O6F:Ce3+,Tb3+ have been synthesized by a high temperature solid-state reaction. The UV-vis reflectance, photoluminescence emission and excitation spectra, the lifetime, and the effect of Tb3+ concentration are investigated in detail. The intense green emission is realized in the Ca2Al3O6F:0.08(3+),0.05Tb(3+) phosphors on the basis of the highly efficient energy transfer from Ce3+ to Tb3+ with an efficiency of over 90%. The energy transfer mechanism from Ce3+ to Tb3+ in the Ca2Al3O6F host was ascribed to the exchange interactions, and the formation of the Ce-Ce clusters and Ce-Tb clusters should be the reason for the high energy transfer efficiency. The critical distance of the energy transfer has also been calculated by the concentration-quenching method. These results indicate that the Ca2Al3O6F:Ce3+,Tb3+ phosphors have potential applications as a near UV-convertible phosphor for white light-emitting diodes because of its broad excitation in the near-ultraviolet range and the efficient green emission light.

入藏号: WOS:000306725200051

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Chemistry, Physical; Nanoscience & Nanotechnology; Materials Science, Multidisciplinary

ISSN: 1932-7447

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 351 条，共 381 条

标题: Tectonic evolution of the Qinghai-Tibet Plateau

作者: Pan, GT (Pan, Guitang); Wang, LQ (Wang, Liquan); Li, RS (Li, Rongshe); Yuan, SH (Yuan, Sihua); Ji, WH (Ji, Wenhua); Yin, FG (Yin, Fuguang); Zhang, WP (Zhang, Wanping); Wang, BD (Wang, Baodi)

来源出版物: JOURNAL OF ASIAN EARTH SCIENCES 卷: 53 特刊: SI 页: 3-14 DOI: 10.1016/j.jseaes.2011.12.018 出版年: JUL 7 2012

Web of Science 核心合集中的 "被引频次": 390

被引频次合计: 511

摘要: The Qinghai-Tibet Plateau, composed of several continental slivers within the eastern Tethyan domain, is one of the pivotal sites to examine to better understand the theory of plate tectonics and the orogenic evolution on Earth. This plateau is generally inferred to be a collage of several continental blocks that rifted from Gondwanaland and subsequently accreted to the Asian continent. However, recent recognition of over twenty ophiolite melange zones and their associated island arcs indicates that the traditional model of tectonic evolution requires revision. Based on 177 recently finished 1:250,000 scale geological maps and related studies, we summarize the main tectonic context of the Qinghai-Tibet Plateau and propose a new integrated model to account for the new findings. The complex orogen of the immense Qinghai-Tibet Plateau, consisting of multiple island arc-basin systems that developed at different stages while surrounded by the North China, Yangtze, Tarim, and Indian plates, is emphasized. The entire orogen, surrounded by suture zones that mark the locations of oceanic closure, is investigated by examining (I) the first-order tectonic units and ophiolitic melanges (including arc-arc/continent collision zones) and (II) their internally enclosed blocks as the second-order tectonic units. Therefore, the Qinghai-Tibet Plateau is divided into three major orogenic systems, namely, from northeast to southwest, the Early Paleozoic Qinling-Qilianshan-Kunlunshan (Qin-Qi-Kun), the Late Paleozoic-Triassic Qiangtang-Sanjiang, and the Late Paleozoic to Cenozoic Gangdese-Himalaya orogenic systems, which are separated by the Kangxiwa-Muzitagh-Maqin-Mianxian and the Bangong-Shuanghu-Changning-Menglian sutures, respectively. We propose that the formation and evolution of the Qinghai-Tibet Plateau to have been intrinsically related to those of the eastern Tethys, recorded by the Longmu Co-Shuanghu ophiolite melange zone, the Southern Qiangtang Paleozoic accretionary arc-basin system, the Bangong-Nujiang suture zone, and their associated, composite island arc-basin systems. The present-day Bangong-Shuanghu-Changning-Menglian suture system marks the final closure of the Tethyan Ocean. The Yarlung Zangbo Ocean opened as a back-arc basin in response to the southward subduction of the Tethyan Ocean lithosphere in the Middle Triassic and closed as a result of the India-Asia collision at the end of Cretaceous, followed by the northward indention of the Indian plate that resulted in significant intra-continental deformation and plateau uplift in the Cenozoic. (C) 2012 Elsevier Ltd. All rights reserved.

入藏号: WOS:000306246700002

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1367-9120

eISSN: 1878-5786

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 352 条，共 381 条

标题: Lithium storage in nitrogen-rich mesoporous carbon materials

作者: Mao, Y (Mao, Ya); Duan, H (Duan, Hui); Xu, B (Xu, Bin); Zhang, L (Zhang, Lin); Hu, YS (Hu, Yongsheng); Zhao, CC (Zhao, Changchun); Wang, ZX (Wang, Zhaoxiang); Chen, LQ (Chen, Liquan); Yang, YS (Yang, Yusheng)

来源出版物: ENERGY & ENVIRONMENTAL SCIENCE 卷: 5 期: 7 页: 7950-7955 DOI: 10.1039/c2ee21817h 出版年: JUL 2012

Web of Science 核心合集中的 "被引频次": 469

被引频次合计: 473

摘要: Nitrogen-rich mesoporous carbon materials were obtained by pyrolyzing gelatin between 700 and 900 degrees C with a nano-CaCO3 template. The mesoporous structure and the high nitrogen content endowed these materials with reversible capacities up to ca. 1200 mA h g (-1). The high specific surface area and the nitrogen doping are responsible for the capacity loss in the initial cycle. FTIR and XPS studies indicate that the nitrogen in the material exists in the form of pyridinic, pyrrolic/pyridonic and graphitic nitrogen. The Raman spectroscopic analysis indicates that the structure of the mesoporous carbon becomes more disordered during discharge and is restored during recharge, a behavior similar to that in nitrogen-free hard carbon materials. The reversible structural variation of these carbon materials ensures their high cyclic reversibility.

入藏号: WOS:000305530900035

出版商: ROYAL SOC CHEMISTRY

出版商地址: THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS, ENGLAND

Web of Science 类别: Chemistry, Multidisciplinary; Energy & Fuels; Engineering, Chemical; Environmental Sciences

ISSN: 1754-5692

eISSN: 1754-5706

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 353 条，共 381 条

标题: A Self-Learning Particle Swarm Optimizer for Global Optimization Problems

作者: Li, CH (Li, Changhe); Yang, SX (Yang, Shengxiang); Nguyen, TT (Nguyen, Trung Thanh)

来源出版物: IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART B-CYBERNETICS 卷: 42 期: 3 页: 627-646 DOI: 10.1109/TSMCB.2011.2171946 出版年: JUN 2012

Web of Science 核心合集中的 "被引频次": 219

被引频次合计: 254

摘要: Particle swarm optimization (PSO) has been shown as an effective tool for solving global optimization problems. So far, most PSO algorithms use a single learning pattern for all particles, which means that all particles in a swarm use the same strategy. This monotonic learning pattern may cause the lack of intelligence for a particular particle, which makes it unable to deal with different complex situations. This paper presents a novel algorithm, called self-learning particle swarm optimizer (SLPSO), for global optimization problems. In SLPSO, each particle has a set of four strategies to cope with different situations in the search space. The cooperation of the four strategies is implemented by an adaptive learning framework at the individual level, which can enable a particle to choose the optimal strategy according to its own local fitness landscape. The experimental study on a set of 45 test functions and two real-world problems show that SLPSO has a superior performance in comparison with several other peer algorithms.

入藏号: WOS:000304163200005

PubMed ID: 22067435

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Automation & Control Systems; Computer Science, Artificial Intelligence; Computer Science, Cybernetics

ISSN: 1083-4419

eISSN: 1941-0492

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 354 条，共 381 条

标题: The timing and pattern of biotic recovery following the end-Permian mass extinction

作者: Chen, ZQ (Chen, Zhong-Qiang); Benton, MJ (Benton, Michael J.)

来源出版物: NATURE GEOSCIENCE 卷: 5 期: 6 页: 375-383 DOI: 10.1038/NGEO1475 出版年: JUN 2012

Web of Science 核心合集中的 "被引频次": 366

被引频次合计: 396

摘要: The aftermath of the great end-Permian period mass extinction 252 Myr ago shows how life can recover from the loss of >90% species globally. The crisis was triggered by a number of physical environmental shocks (global warming, acid rain, ocean acidification and ocean anoxia), and some of these were repeated over the next 5-6 Myr. Ammonoids and some other groups diversified rapidly, within 1-3 Myr, but extinctions continued through the Early Triassic period. Triassic ecosystems were rebuilt stepwise from low to high trophic levels through the Early to Middle Triassic, and a stable, complex ecosystem did not re-emerge until the beginning of the Middle Triassic, 8-9 Myr after the crisis. A positive aspect of the recovery was the emergence of entirely new groups, such as marine reptiles and decapod crustaceans, as well as new tetrapods on land, including-eventually-dinosaurs. The stepwise recovery of life in the Triassic could have been delayed either by biotic drivers (complex multispecies interactions) or physical perturbations, or a combination of both. This is an example of the wider debate about the relative roles of intrinsic and extrinsic drivers of large-scale evolution.

入藏号: WOS:000307079700010

出版商: NATURE PUBLISHING GROUP

出版商地址: 75 VARICK ST, 9TH FLR, NEW YORK, NY 10013-1917 USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1752-0894

eISSN: 1752-0908

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 355 条，共 381 条

标题: Comparison of low-field NMR and mercury intrusion porosimetry in characterizing pore size distributions of coals

作者: Yao, YB (Yao, Yanbin); Liu, DM (Liu, Dameng)

来源出版物: FUEL 卷: 95 期: 1 页: 152-158 DOI: 10.1016/j.fuel.2011.12.039 出版年: MAY 2012

Web of Science 核心合集中的 "被引频次": 300

被引频次合计: 342

摘要: In this study we investigated how traditional mercury intrusion porosimetry (MIP), constant-ratecontrolled mercury porosimetry (CMP), Low-field NMR spectral analysis (LFNMR), and micro focus computerized tomography (mu CT) compare in revealing the pore size distribution (PSD) characteristics of coals. The comparison was made using the same source samples throughout. Two limitations of mercury porosimetry are addressed. First, the high-pressure intrusion by mercury may either deform or destroy the coal sample and eventually induce suspect value of coal porosity, thus correction of pore structure compressibility must be made in analyzing lignite or other coals that with very open structure. Second, pore shielding effects can induce high uncertainty of MIP results, in particular when clusters of smaller pores occur in isolated domains in a continuous network of larger pores. This can result in temporary mercury entrapment during the extrusion process and result in inaccurate estimations of PSD. Another pore shielding effect is due to isolated clusters of large pores in a continuous network of smaller pores. Her mercury is prone to be trapped permanently. This effect can induce inaccurate estimations of the total pore volume. CMP is an effective method that can provide much more detailed PSD information of macropores, however it is deficient in analyzing mesopores of coals. After comparison with the results by mu CT and other traditional methods, it was found that LFNMR is an efficient tool for nondestructively quantifying the PSD of coal. (C) 2011 Elsevier Ltd. All rights reserved.

入藏号: WOS:000300615900020

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0016-2361

eISSN: 1873-7153

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 356 条，共 381 条

标题: Climate warming in the latest Permian and the Permian-Triassic mass extinction

作者: Joachimski, MM (Joachimski, Michael M.); Lai, XL (Lai, Xulong); Shen, SZ (Shen, Shuzhong); Jiang, HS (Jiang, Haishui); Luo, GM (Luo, Genming); Chen, B (Chen, Bo); Chen, J (Chen, Jun); Sun, YD (Sun, Yadong)

来源出版物: GEOLOGY 卷: 40 期: 3 页: 195-198 DOI: 10.1130/G32707.1 出版年: MAR 2012

Web of Science 核心合集中的 "被引频次": 297

被引频次合计: 326

摘要: High-resolution oxygen isotope records document the timing and magnitude of global warming across the Permian-Triassic (P-Tr) boundary. Oxygen isotope ratios measured on phosphate-bound oxygen in conodont apatite from the Meishan and Shangsi sections (South China) decrease by 2 parts per thousand in the latest Permian, translating into low-latitude surface water warming of 8 degrees C. The oxygen isotope shift coincides with the negative shift in carbon isotope ratios of carbonates, suggesting that the addition of isotopically light carbon to the ocean-atmosphere system by Siberian Traps volcanism and related processes resulted in higher greenhouse gas levels and global warming. The major temperature rise started immediately before the main extinction phase, with maximum and harmful temperatures documented in the latest Permian (Meishan: bed 27). The coincidence of climate warming and the main pulse of extinction suggest that global warming was one of the causes of the collapse of the marine and terrestrial ecosystems. In addition, very warm climate conditions in the Early Triassic may have played a major role in the delayed recovery in the aftermath of the Permian-Triassic crisis.

入藏号: WOS:000301171200001

出版商: GEOLOGICAL SOC AMER, INC

出版商地址: PO BOX 9140, BOULDER, CO 80301-9140 USA

Web of Science 类别: Geology

ISSN: 0091-7613

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 357 条，共 381 条

标题: Improved in situ Hf isotope ratio analysis of zircon using newly designed X skimmer cone and jet sample cone in combination with the addition of nitrogen by laser ablation multiple collector ICP-MS

作者: Hu, ZC (Hu, Zhaochu); Liu, YS (Liu, Yongsheng); Gao, S (Gao, Shan); Liu, WG (Liu, Wengui); Zhang, W (Zhang, Wen); Tong, XR (Tong, Xirun); Lin, L (Lin, Lin); Zong, KQ (Zong, Keqing); Li, M (Li, Ming); Chen, HH (Chen, Haihong); Zhou, L (Zhou, Lian); Yang, L (Yang, Lu)

来源出版物: JOURNAL OF ANALYTICAL ATOMIC SPECTROMETRY 卷: 27 期: 9 页: 1391-1399 DOI: 10.1039/c2ja30078h 出版年: 2012

Web of Science 核心合集中的 "被引频次": 558

被引频次合计: 675

摘要: The effect of three different cone combinations on the performance of laser ablation MC-ICP-MS (Neptune plus) for the in situ Hf isotope analysis of zircon were investigated. The signal sensitivities of Hf, Yb and Lu were improved by a factor of 1.4 and 2.5, respectively, with using the X skimmer cone + standard sampler cone and the X skimmer cone + Jet sample cone compared to the standard arrangement (H skimmer cone + standard sample cone). However, when using the high-sensitivity Jet sample cone, the instrumental mass fractionation for hafnium displayed a large non-linear component that could not be corrected using the normal mass fractionation laws. The magnitude of this non-linear mass fractionation was strongly related to the central gas flow rate. The in situ Hf isotope analysis of zircon standards 91500 and Mud Tank using the Jet cone displayed large deviations (410-470 ppm) at the optimum central gas flow rate for Hf, which seriously deteriorated the performance of the Jet cone. The addition of 4 ml min(-1) nitrogen to the central gas flow in laser ablation MC-ICP-MS was found to not only increase the sensitivity of Hf by a factor of 2.1, but also suppress this non-linear mass fractionation. The determined Yb/Hf and Lu/Hf ratios at their corresponding optimum makeup gas flow rates for Hf intensity were found to be reduced by factors of 2 and 1.3 in the presence of nitrogen, respectively, which would benefit the accurate in situ determination of Hf isotopes in high-content Yb and Lu samples. Compared to the standard arrangement, the corresponding precision (2 sigma) of Hf-176/Hf-177 for single spot analysis of zircon standard 91500 was improved from 224 ppm to 50 ppm by using the newly designed X-skimmer cone and Jet sample cone in combination with the nitrogen addition technique. The determined Hf-176/Hf-177 ratios are in excellent agreement with published values in five reference zircon standards (91500, GJ-1, Mud Tank, Penglai and Plesovice). Our first Hf isotopic results from zircon standard M257 (0.281544 +/- 0.000018; 2SD, n = 151) showed that it was fairly homogeneous in Hf isotopes. These results clearly demonstrate that the present analytical method has the potential to become an important tool for the pursuit of high-quality in situ Hf isotope data for zircons.

入藏号: WOS:000307306600003

出版商: ROYAL SOC CHEMISTRY

出版商地址: THOMAS GRAHAM HOUSE, SCIENCE PARK, MILTON RD, CAMBRIDGE CB4 0WF, CAMBS, ENGLAND

Web of Science 类别: Chemistry, Analytical; Spectroscopy

ISSN: 0267-9477

eISSN: 1364-5544

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 358 条，共 381 条

标题: A tectono-genetic model for porphyry-skarn-stratabound Cu-Au-Mo-Fe and magnetite-apatite deposits along the Middle-Lower Yangtze River Valley, Eastern China

作者: Mao, JW (Mao, Jingwen); Xie, GQ (Xie, Guiqing); Duan, C (Duan, Chao); Pirajno, F (Pirajno, Franco); Ishiyama, D (Ishiyama, Dazio); Chen, YC (Chen, Yuchuan)

来源出版物: ORE GEOLOGY REVIEWS 卷: 43 期: 1 特刊: SI 页: 294-314 DOI: 10.1016/j.oregeorev.2011.07.010 出版年: DEC 2011

Web of Science 核心合集中的 "被引频次": 233

被引频次合计: 285

摘要: The Middle-Lower Yangtze River Valley metallogenic belt (YRB), situated along the northern margin of the Yangtze craton, is characterized by porphyry-skarn-stratabound Cu-Au-Mo-Fe deposits in the areas of uplift and magnetite-apatite deposits in Cretaceous fault basins. Following detailed field investigations and a review of published data, we recognize two episodes of magmatism and mineralization in the YRB: 1) 156-137 Ma high-K calc-alkaline granitoids associated with 148-135 Maporphyry-skarn-stratabound Cu-Au-Mo-Fe deposits and 2) 135-123 Ma shoshonitic series, associated with 134.9-122.9 Ma magnetite-apatite deposits. A-type granitoids and associated alkaline volcanic have a small age range from 126.5 to 124.8 Ma and are temporally, spatially and genetically associated with the second episode. The geodynamic history of the YRB did not experience the Paleozoic to Mesozoic lithospheric thickening that took place in the North China craton. This process is inferred to be linked to partial melting of the delaminated lower crust at high pressures, resulting in the development of C-type adakitic rocks. The petrochemical and Sr/Nd isotopic data show that both the shoshonitic series and A-type granitoids are quite different from adakites, with only some of the K-calc-alkaline granitoids having adakitic signatures. Previous ore genesis models were established based on an assumed relationship with adakites and a continuous tectono-thermal evolution from 150 to 100 Ma.

All data obtained for the Middle-Lower Yangtze River region consistently show that the Tan-Lu regional strike-slip fault zone, initiated at 233 +/- 6 to 225 +/- 6 Ma from the collision between the North China and Yangtze cratons and was reactivated at ca. 160 Ma The Tan-Lu fault was caused by the oblique subduction of the Izanagi plate, which along the YRB the low-angle subducted slab and the overlying crust was disrupted or broken due to the disharmonious movement of the two blocks. The high-K calc-alkaline granitoids magmas were derived from melting of the subducted slab, with some input of crustal material. These magmas were emplaced at the intersections between NE- and EW-trending faults and formed porphyty-skarn-stratabound Cu-Au-Mo-Fe deposits between 156 and 137 Ma. After 135 Ma the subducted plate changed its direction of motion to northeast, now running parallel to the Eurasian continental margin, and leading to large-scale continental extension. The shoshonitic series and subsequent A-type granitoids magmatism and the development of magnetite-apatite ores in the YRB, took place in both fault basins and NE-trending rifts between 135 and 124 Ma (C) 2011 Elsevier B.V. All rights reserved.

入藏号: WOS:000298906600023

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geology; Mineralogy; Mining & Mineral Processing

ISSN: 0169-1368

eISSN: 1872-7360

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 359 条，共 381 条

标题: Species-specific responses of Late Quaternary megafauna to climate and humans

作者: Lorenzen, ED (Lorenzen, Eline D.); Nogues-Bravo, D (Nogues-Bravo, David); Orlando, L (Orlando, Ludovic); Weinstock, J (Weinstock, Jaco); Binladen, J (Binladen, Jonas); Marske, KA (Marske, Katharine A.); Ugan, A (Ugan, Andrew); Borregaard, MK (Borregaard, Michael K.); Gilbert, MTP (Gilbert, M. Thomas P.); Nielsen, R (Nielsen, Rasmus); Ho, SYW (Ho, Simon Y. W.); Goebel, T (Goebel, Ted); Graf, KE (Graf, Kelly E.); Byers, D (Byers, David); Stenderup, JT (Stenderup, Jesper T.); Rasmussen, M (Rasmussen, Morten); Campos, PF (Campos, Paula F.); Leonard, JA (Leonard, Jennifer A.); Koepfli, KP (Koepfli, Klaus-Peter); Froese, D (Froese, Duane); Zazula, G (Zazula, Grant); Stafford, TW (Stafford, Thomas W., Jr.); Aaris-Sorensen, K (Aaris-Sorensen, Kim); Batra, P (Batra, Persaram); Haywood, AM (Haywood, Alan M.); Singarayer, JS (Singarayer, Joy S.); Valdes, PJ (Valdes, Paul J.); Boeskorov, G (Boeskorov, Gennady); Burns, JA (Burns, James A.); Davydov, SP (Davydov, Sergey P.); Haile, J (Haile, James); Jenkins, DL (Jenkins, Dennis L.); Kosintsev, P (Kosintsev, Pavel); Kuznetsova, T (Kuznetsova, Tatyana); Lai, XL (Lai, Xulong); Martin, LD (Martin, Larry D.); McDonald, HG (McDonald, H. Gregory); Mol, D (Mol, Dick); Meldgaard, M (Meldgaard, Morten); Munch, K (Munch, Kasper); Stephan, E (Stephan, Elisabeth); Sablin, M (Sablin, Mikhail); Sommer, RS (Sommer, Robert S.); Sipko, T (Sipko, Taras); Scott, E (Scott, Eric); Suchard, MA (Suchard, Marc A.); Tikhonov, A (Tikhonov, Alexei); Willerslev, R (Willerslev, Rane); Wayne, RK (Wayne, Robert K.); Cooper, A (Cooper, Alan); Hofreiter, M (Hofreiter, Michael); Sher, A (Sher, Andrei); Shapiro, B (Shapiro, Beth); Rahbek, C (Rahbek, Carsten); Willerslev, E (Willerslev, Eske)

来源出版物: NATURE 卷: 479 期: 7373 页: 359-U195 DOI: 10.1038/nature10574 出版年: NOV 17 2011

Web of Science 核心合集中的 "被引频次": 379

被引频次合计: 389

摘要: Despite decades of research, the roles of climate and humans in driving the dramatic extinctions of large-bodied mammals during the Late Quaternary period remain contentious. Here we use ancient DNA, species distribution models and the human fossil record to elucidate how climate and humans shaped the demographic history of woolly rhinoceros, woolly mammoth, wild horse, reindeer, bison and musk ox. We show that climate has been a major driver of population change over the past 50,000 years. However, each species responds differently to the effects of climatic shifts, habitat redistribution and human encroachment. Although climate change alone can explain the extinction of some species, such as Eurasian musk ox and woolly rhinoceros, a combination of climatic and anthropogenic effects appears to be responsible for the extinction of others, including Eurasian steppe bison and wild horse. We find no genetic signature or any distinctive range dynamics distinguishing extinct from surviving species, emphasizing the challenges associated with predicting future responses of extant mammals to climate and human-mediated habitat change.

入藏号: WOS:000297059700037

PubMed ID: 22048313

出版商: NATURE PUBLISHING GROUP

出版商地址: MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

Web of Science 类别: Multidisciplinary Sciences

ISSN: 0028-0836

eISSN: 1476-4687

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 360 条，共 381 条

标题: Late Cryogenian-Ediacaran history of the Arabian-Nubian Shield: A review of depositional, plutonic, structural, and tectonic events in the closing stages of the northern East African Orogen

作者: Johnson, PR (Johnson, P. R.); Andresen, A (Andresen, A.); Collins, AS (Collins, A. S.); Fowler, AR (Fowler, A. R.); Fritz, H (Fritz, H.); Ghebreab, W (Ghebreab, W.); Kusky, T (Kusky, T.); Stern, RJ (Stern, R. J.)

来源出版物: JOURNAL OF AFRICAN EARTH SCIENCES 卷: 61 期: 3 页: 167-232 DOI: 10.1016/j.jafrearsci.2011.07.003 出版年: OCT 2011

Web of Science 核心合集中的 "被引频次": 314

被引频次合计: 317

摘要: During the late Cryogenian-Ediacaran (650-542 Ma), the Arabian-Nubian Shield CANS) underwent final assembly and accretion to the Saharan Metacraton concurrent with the assembly of eastern and western Gondwana. At the end of the Precambrian it lay at one end of the East African Orogen, with its northern margin (present coordinates) forming a low-relief stable shelf facing an open ocean; to the south the ANS transitioned into the Mozambique Belt. The geologic history of the ANS during this period provides insight into the closing developmental stages of one of the world's largest accretionary orogens. Following a 680-640 Ma orogenic event reflecting amalgamation of a core grouping of island-arc terranes (the proto-Arabian-Nubian Shield; pANS), the region underwent extensive exhumation, erosion, and subsidence. Depositional basins formed in the northern and eastern pANS, with those in the east below sea level and connected to an ocean. Periodic basin closure and formation of new basins in other parts of the ANS followed. Many basins were filled by terrestrial, molasse-type sediments interfingering with subordinate to predominant amounts of volcanic rocks. Magmatism was extensive throughout the period, initially characterized by tonalite-trondhjemite-granodiorite (TTG) and granite (monzogranite, syenogranite), but also characterized, from similar to 610 Ma on, by increasing amounts of alkali-feldspar granite and alkali granite. The plutons are largely undeformed, except where cut by brittle-ductile shear zones. The magma sources of the late Cryogenian-Ediacaran granitoids were dominated by juvenile crust and(or) depleted mantle and magmas mostly originated in anorogenic, post-collisional, commonly extensional, settings. They were derived by melting and fractionation of anhydrous high-grade metamorphosed lower crust, mafic- to intermediate calc-alkaline crust, and(or) subduction-modified mantle wedges associated with slab break-off or delamination.

By similar to 630 Ma, the region was affected by oblique (transpressional) convergence of continental blocks that formed eastern and western Gondwana the pANS was approaching the Saharan Metacraton; north-trending shear and shortening zones developed in the southern ANS; and northwest-trending strike-slip shear zones of the Najd fault system dominated farther north. In the northwestern ANS, convergence and Najd transpression buckled the crust causing structural highs with domes of gneissic infracrust overlain by supracrust composed of ophiolitic and volcanosedimentary assemblages dating from the Tonian-middle Cryogenian period of island-arc activity. The supracrust was extensively translated to the northwest above a high-strain zone. Extension and tectonic escape augmented exhumation of the gneissic infracrust particularly between similar to 620-580 Ma. In the northeastern ANS, linear belts of gneiss formed from reworked older intrusive bodies or syntectonic intrusions that were emplaced along Najd faults. By similar to 620 Ma a marine basin on the eastern margin of the pANS (present coordinates) was beginning to close. A thick sedimentary assemblage (Abt formation) in this basin underwent metamorphism and folding, and subduction-related magmatism and volcanism farther into this basin (Al Amar arc; >690-615 Ma) was coming to an end. Amalgamation of the Abt formation, Al Amar arc, and the pANS occurred between similar to 620 and similar to 605 Ma, and terminal collision between the pANS and the Saharan Metacraton was complete by similar to 580 Ma. At this time, the ANS was fully assembled. Granite magmatism continued until similar to 565-560 Ma and orogeny ceased by similar to 550 Ma. During these terminal events, the region underwent strong chemical weathering and became a vast low-relief surface on which Lower Paleozoic sandstone was eventually deposited. (C) 2011 Elsevier Ltd. All rights reserved.

入藏号: WOS:000296659700001

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1464-343X

eISSN: 1879-1956

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 361 条，共 381 条

标题: Lag synchronization of complex networks via pinning control

作者: Guo, WL (Guo, Wanli)

来源出版物: NONLINEAR ANALYSIS-REAL WORLD APPLICATIONS 卷: 12 期: 5 页: 2579-2585 DOI: 10.1016/j.nonrwa.2011.03.007 出版年: OCT 2011

Web of Science 核心合集中的 "被引频次": 87

被引频次合计: 89

摘要: This paper mainly investigates the lag synchronization of complex networks via pinning control. Without assuming the symmetry and irreducibility of the coupling matrix, sufficient conditions of lag synchronization are obtained by adding controllers to a part of nodes. Particularly, the following two questions are solved: (1) How many controllers are needed to pin a coupled complex network to a homogeneous solution? (2) How should we distribute these controllers? Finally, a simple example is provided to demonstrate the effectiveness of the theory. (C) 2011 Elsevier Ltd. All rights reserved.

入藏号: WOS:000292404900011

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Mathematics, Applied

ISSN: 1468-1218

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 362 条，共 381 条

标题: Widespread iron-rich conditions in the mid-Proterozoic ocean

作者: Planavsky, NJ (Planavsky, Noah J.); McGoldrick, P (McGoldrick, Peter); Scott, CT (Scott, Clinton T.); Li, C (Li, Chao); Reinhard, CT (Reinhard, Christopher T.); Kelly, AE (Kelly, Amy E.); Chu, XL (Chu, Xuelei); Bekker, A (Bekker, Andrey); Love, GD (Love, Gordon D.); Lyons, TW (Lyons, Timothy W.)

来源出版物: NATURE 卷: 477 期: 7365 页: 448-U95 DOI: 10.1038/nature10327 出版年: SEP 22 2011

Web of Science 核心合集中的 "被引频次": 250

被引频次合计: 263

摘要: The chemical composition of the ocean changed markedly with the oxidation of the Earth's surface(1), and this process has profoundly influenced the evolutionary and ecological history of life(2,3). The early Earth was characterized by a reducing ocean-atmosphere system, whereas the Phanerozoic eon (less than 542 million years ago) is known for a stable and oxygenated biosphere conducive to the radiation of animals. The redox characteristics of surface environments during Earth's middle age (1.8-1 billion years ago) are less well known, but it is generally assumed that the mid-Proterozoic was home to a globally sulphidic (euxinic) deep ocean(2,3). Here we present iron data from a suite of mid-Proterozoic marine mudstones. Contrary to the popular model, our results indicate that ferruginous (anoxic and Fe2+-rich) conditions were both spatially and temporally extensive across diverse palaeogeographic settings in the mid-Proterozoic ocean, inviting new models for the temporal distribution of iron formations and the availability of bioessential trace elements during a critical window for eukaryotic evolution.

入藏号: WOS:000295080500037

PubMed ID: 21900895

出版商: NATURE PUBLISHING GROUP

出版商地址: MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

Web of Science 类别: Multidisciplinary Sciences

ISSN: 0028-0836

eISSN: 1476-4687

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 363 条，共 381 条

标题: Lhasa terrane in southern Tibet came from Australia

作者: Zhu, DC (Zhu, Di-Cheng); Zhao, ZD (Zhao, Zhi-Dan); Niu, YL (Niu, Yaoling); Dilek, Y (Dilek, Yildirim); Mo, XX (Mo, Xuan-Xue)

来源出版物: GEOLOGY 卷: 39 期: 8 页: 727-730 DOI: 10.1130/G31895.1 出版年: AUG 2011

Web of Science 核心合集中的 "被引频次": 295

被引频次合计: 350

摘要: The U-Pb age and Hf isotope data on detrital zircons from Paleozoic metasedimentary rocks in the Lhasa terrane (Tibet) define a distinctive age population of ca. 1170 Ma with epsilon(Hf)(t) values identical to the coeval detrital zircons from Western Australia, but those from the western Qiangtang and Tethyan Himalaya terranes define an age population of ca. 950 Ma with a similar epsilon(Hf)(t) range. The ca. 1170 Ma detrital zircons in the Lhasa terrane were most likely derived from the Albany-Fraser belt in southwest Australia, whereas the ca. 950 Ma detrital zircons from both the western Qiangtang and Tethyan Himalaya terranes might have been sourced from the High Himalaya to the south. Such detrital zircon connections enable us to propose that the Lhasa terrane is exotic to the Tibetan Plateau system, and should no longer be considered as part of the Qiangtang-Greater India-Tethyan Himalaya continental margin system in the Paleozoic reconstruction of the Indian plate, as current models show; rather, it should be placed at the northwestern margin of Australia. These results provide new constraints on the paleogeographic reconstruction and tectonic evolution of southern Tibet, and indicate that the Lhasa terrane evolved as part of the late Precambrian-early Paleozoic evolution as part of Australia in a different paleogeographical setting than that of the Qiangtang-Greater India-Tethyan Himalaya system.

入藏号: WOS:000292824100006

出版商: GEOLOGICAL SOC AMER, INC

出版商地址: PO BOX 9140, BOULDER, CO 80301-9140 USA

Web of Science 类别: Geology

ISSN: 0091-7613

eISSN: 1943-2682

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 364 条，共 381 条

标题: Monitoring lake level changes on the Tibetan Plateau using ICESat altimetry data (2003-2009)

作者: Zhang, GQ (Zhang, Guoqing); Xie, HJ (Xie, Hongjie); Kang, SC (Kang, Shichang); Yi, DH (Yi, Donghui); Ackley, SF (Ackley, Stephen F.)

来源出版物: REMOTE SENSING OF ENVIRONMENT 卷: 115 期: 7 页: 1733-1742 DOI: 10.1016/j.rse.2011.03.005 出版年: JUL 15 2011

Web of Science 核心合集中的 "被引频次": 291

被引频次合计: 345

摘要: In this study. ICESat altimetry data are used to provide precise lake elevations of the Tibetan Plateau (IF) during the period of 2003-2009. Among the 261 lakes examined ICESat data are available on 111 lakes: 74 lakes with ICESat footprints for 4-7 years and 37 lakes with footprints for 1-3 years. This is the first time that precise lake elevation data are provided for the 111 lakes. Those ICESat elevation data can be used as baselines for future changes in lake levels as well as for changes during the 2003-2009 period. It is found that in the 74 lakes (56 salt lakes) examined, 62 (i.e. 84%) of all lakes and 50 (i.e. 89%) of the salt lakes show tendency of lake level increase. The mean lake water level increase rate is 0.23 m/year for the 56 salt lakes and 0.27 m/year for the 50 salt lakes of water level increase. The largest lake level increase rate (0.80 m/year) found in this study is the lake Cedo Caka. The 74 lakes are grouped into four subareas based on geographical locations and change tendencies in lake levels. Three of the four subareas show increased lake levels. The mean lake level change rates for subareas I, II, III, IV, and the entire TP are 0.12, 0.26, 0.19, -0.11, and 0.2 m/year, respectively. These recent increases in lake level, particularly for a high percentage of salt lakes, supports accelerated glacier melting due to global warming as the most likely cause. (C) 2011 Elsevier Inc. All rights reserved.

入藏号: WOS:000290506600011

出版商: ELSEVIER SCIENCE INC

出版商地址: STE 800, 230 PARK AVE, NEW YORK, NY 10169 USA

Web of Science 类别: Environmental Sciences; Remote Sensing; Imaging Science & Photographic Technology

ISSN: 0034-4257

eISSN: 1879-0704

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 365 条，共 381 条

标题: Geophysical and geological tests of tectonic models of the North China Craton

作者: Kusky, TM (Kusky, Timothy M.)

来源出版物: GONDWANA RESEARCH 卷: 20 期: 1 特刊: SI 页: 26-35 DOI: 10.1016/j.gr.2011.01.004 出版年: JUL 2011

Web of Science 核心合集中的 "被引频次": 271

被引频次合计: 294

摘要: The geometry and timing of amalgamation of the North China Craton have been controversial, with three main models offering significantly different interpretations of regional structure, geochronology, and geological relationships. One model suggests that the Eastern and Western Blocks of the NCC formed separately in the Archean, and an active margin was developed on the Eastern Block between 2.5 and 1.85 Ga, when the two blocks collided above an east-dipping subduction zone. A second presumes the Eastern Block rifted from an unknown larger continent at circa 2.7 Ga, and experienced a collision with an arc (perhaps attached to the western block) above a west-dipping subduction zone at 2.5 Ga, and the 1.85 Ga metamorphism is related to a collision along the northern margin of the craton when the NCC joined the Columbia supercontinent. A third model suggests two collisions in the Central Orogenic Belt, at 2.1 and 1.88 Ga, but recognizes an early undated deformation event. Recent seismic results reveal details of the deep crustal and lithospheric structure that support both the second and third models, showing that subduction beneath the Central Orogenic Belt was west-directed, and that there is a second, west-dipping paleosubduction zone located to the east of the COB dipping beneath the Western Block (Ordos Craton). The boundaries identified through geophysics do not correlate with the boundaries of the Trans-North China Orogen suggested in the first model, and the subduction polarity is opposite that predicted by that model. High-pressure granulite facies metamorphism at 1.85 Ga is not restricted to the "TNCO" as suggested by the first model, but is documented across the NCC, as predicted by the second model, suggesting a major continent-continent collision along the north margin of the craton at 1.85 Ga. Further, it has recently been shown that in the southern "TNCO", there is no record of metamorphism at circa 1.85 Ga, but only at 2.7-2.5 Ga, showing that the "TNCO", as defined as a circa 1.85 Ga orogen, does not exist. This is further confirmed by recent Re-Os isotopic studies which show that the subcontinental lithospheric mantle beneath the southern COB is late Archean in age, and that a province in the northern NCC is circa 1.8 Ga, correlating with the proposed collision belt of the NCC with the Columbia supercontinent across the entire NCC. The COB is an Archean convergent belt, re-worked in the Paleoproterozoic, and the Paleoproterozoic tectonism is widespread across the NCC, as predicted by the model whereby the previously amalgamated Eastern and Western Blocks experienced a continental collision with Columbia at circa 1.85 Ga, but uplift/exhumation rates are slow, necessitating a re-evaluation of the tectonic models of the NCC. (C) 2011 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000292123600003

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 366 条，共 381 条

标题: Stratigraphy and paleogeography of the Ediacaran Doushantuo Formation (ca. 635-551 Ma) in South China

作者: Jiang, GQ (Jiang, Ganqing); Shi, XY (Shi, Xiaoying); Zhang, SH (Zhang, Shihong); Wang, Y (Wang, Yue); Xiao, SH (Xiao, Shuhai)

来源出版物: GONDWANA RESEARCH 卷: 19 期: 4 页: 831-849 DOI: 10.1016/j.gr.2011.01.006 出版年: JUN 2011

Web of Science 核心合集中的 "被引频次": 287

被引频次合计: 327

摘要: The Ediacaran Doushantuo Formation (ca. 635-551 Ma) in South China contains exceptionally well-preserved fossils of multicellular eukaryotes including early animals, and it is one of the most intensively investigated Ediacaran units in the world. Various stratigraphic methods including litho-, chemo-, bio-, and sequence-stratigraphy have been applied to establish a stratigraphic framework for the Doushantuo Formation, but so far regional correlation across the basin relies heavily on two distinctive marker beds, the cap carbonate at the base and the organic-rich black shale at the top of the Doushantuo Formation. The majority of the Doushantuo Formation in the Yangtze platform was deposited on a rimmed carbonate shelf, with a shelf margin shoal complex that restricted the shelf lagoon from the open ocean. Large facies variations are observed in the shallow margins of the shelf lagoon and in the shelf margin-to-slope transition, where depositional environments were near the chemocline of the stratified, anoxic/euxinic shelf lagoon and of the broader Nanhua basin, respectively. Chemocline instability in the shelf lagoon and in the Nanhua basin caused local geochemical cycling, resulting in significant variations in carbon and sulfur isotopes and in redox-sensitive elemental concentrations. Most benthic eukaryotic fossils (including animal fossils) of the Doushantuo Formation have been found from the shallow margins of the shelf lagoon and from the shelf margin-slope transition, but rarely from deep-water environments that may have been below the chemocline for most of the Doushantuo time, implying the sensitivity of eukaryotes to paleogeographically controlled chemocline fluctuations. (C) 2011 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000290508400001

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 367 条，共 381 条

标题: Timing, scale and mechanism of the destruction of the North China Craton

作者: Zhu, RX (Zhu RiXiang); Chen, L (Chen Ling); Wu, FY (Wu FuYuan); Liu, JL (Liu JunLai)

来源出版物: SCIENCE CHINA-EARTH SCIENCES 卷: 54 期: 6 页: 789-797 DOI: 10.1007/s11430-011-4203-4 出版年: JUN 2011

Web of Science 核心合集中的 "被引频次": 398

被引频次合计: 427

摘要: The North China Craton (NCC) is a classical example of ancient destroyed cratons. Since the initiation of the North China Craton Destruction Project by the National Natural Science Foundation of China, numerous studies have been conducted on the timing, scale, and mechanism of this destruction through combined interdisciplinary research. Available data suggest that the destruction occurred mainly in the eastern NCC, whereas the western NCC was only locally modified. The sedimentation, magmatic activities and structural deformation after cratonization at similar to 1.8 Ga indicate that the NCC destruction took place in the Mesozoic with a peak age of ca 125 Ma. A global comparison suggests that most cratons on Earth are not destroyed, although they have commonly experienced lithospheric thinning; destruction is likely to occur only when the craton has been disturbed by oceanic subduction. The destruction of the NCC was coincident with globally active plate tectonics and high mantle temperatures during the Cretaceous. The subducted Pacific slab destabilized mantle convection beneath the eastern NCC, which resulted in cratonic destruction in the eastern NCC. Delamination and/or thermal-mechanical-chemical erosion resulted from the destabilization of mantle convection.

入藏号: WOS:000290575000001

出版商: SCIENCE PRESS

出版商地址: 16 DONGHUANGCHENGGEN NORTH ST, BEIJING 100717, PEOPLES R CHINA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1674-7313

eISSN: 1869-1897

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 368 条，共 381 条

标题: Reappraisal of the ages of Neoproterozoic strata in South China: No connection with the Grenvillian orogeny

作者: Zhao, JH (Zhao, Jun-Hong); Zhou, MF (Zhou, Mei-Fu); Yan, DP (Yan, Dan-Ping); Zheng, JP (Zheng, Jian-Ping); Li, JW (Li, Jian-Wei)

来源出版物: GEOLOGY 卷: 39 期: 4 页: 299-302 DOI: 10.1130/G31701.1 出版年: APR 2011

Web of Science 核心合集中的 "被引频次": 423

被引频次合计: 487

摘要: The Jiangnan fold belt separates the Yangtze and Cathaysia blocks in South China and has long been considered Grenvillian in age in order to place South China in central Rodinia. It consists of deformed Early Neoproterozoic strata that are unconformably overlain by undeformed Late Neoproterozoic strata and intruded by undeformed and unmetamorphosed granitic plutons. Zircons from the Early Neoproterozoic strata yield U-Pb ages as young as 830 Ma, and one granitic pluton has a zircon U-Pb age of ca. 827 Ma. The >= 830 Ma mafic rocks along the southeastern margin of the Yangtze block have arc-affinity geochemical characters, whereas mafic rocks younger than 830 Ma have typical ocean island basalt (OIB)-like compositions. Thus, we suggest that the Early Neoproterozoic strata were deposited on an active continental margin prior to amalgamation of the Yangtze and Cathaysia blocks at ca. 830 Ma. The overlying Late Neoproterozoic strata were deposited in the intracontinental rifted Nanhua Basin at 820-730 Ma and probably reflect backarc spreading above the long-lived (950-735 Ma) oceanic subduction zone along the northern and western margin of the Yangtze block. This model is consistent with the secular tectonic evolution of South China during the Neoproterozoic. The Jiangnan fold belt is therefore not a Grenvillian feature as previously suggested, and there is no evidence to place South China in central Rodinia. Instead, we believe that South China was located in a marginal position relative to this supercontinent.

入藏号: WOS:000288507300003

出版商: GEOLOGICAL SOC AMER, INC

出版商地址: PO BOX 9140, BOULDER, CO 80301-9140 USA

Web of Science 类别: Geology

ISSN: 0091-7613

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 369 条，共 381 条

标题: DE/BBO: a hybrid differential evolution with biogeography-based optimization for global numerical optimization

作者: Gong, WY (Gong, Wenyin); Cai, ZH (Cai, Zhihua); Ling, CX (Ling, Charles X.)

来源出版物: SOFT COMPUTING 卷: 15 期: 4 页: 645-665 DOI: 10.1007/s00500-010-0591-1 出版年: APR 2011

Web of Science 核心合集中的 "被引频次": 201

被引频次合计: 213

摘要: Differential evolution (DE) is a fast and robust evolutionary algorithm for global optimization. It has been widely used in many areas. Biogeography-based optimization (BBO) is a new biogeography inspired algorithm. It mainly uses the biogeography-based migration operator to share the information among solutions. In this paper, we propose a hybrid DE with BBO, namely DE/BBO, for the global numerical optimization problem. DE/BBO combines the exploration of DE with the exploitation of BBO effectively, and hence it can generate the promising candidate solutions. To verify the performance of our proposed DE/BBO, 23 benchmark functions with a wide range of dimensions and diverse complexities are employed. Experimental results indicate that our approach is effective and efficient. Compared with other state-of-the-art DE approaches, DE/BBO performs better, or at least comparably, in terms of the quality of the final solutions and the convergence rate. In addition, the influence of the population size, dimensionality, different mutation schemes, and the self-adaptive control parameters of DE are also studied.

入藏号: WOS:000288253400004

出版商: SPRINGER

出版商地址: ONE NEW YORK PLAZA, SUITE 4600, NEW YORK, NY, UNITED STATES

Web of Science 类别: Computer Science, Artificial Intelligence; Computer Science, Interdisciplinary Applications

ISSN: 1432-7643

eISSN: 1433-7479

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 370 条，共 381 条

标题: The collision between the Yili and Tarim blocks of the Southwestern Altaids: Geochemical and age constraints of a leucogranite dike crosscutting the HP-LT metamorphic belt in the Chinese Tianshan Orogen

作者: Gao, J (Gao, Jun); Klemd, R (Klemd, Reiner); Qian, Q (Qian, Qing); Zhang, X (Zhang, Xi); Li, JL (Li, Jilei); Jiang, T (Jiang, Tuo); Yang, YQ (Yang, Yongqiang)

来源出版物: TECTONOPHYSICS 卷: 499 期: 1-4 页: 118-131 DOI: 10.1016/j.tecto.2011.01.001 出版年: MAR 2 2011

Web of Science 核心合集中的 "被引频次": 206

被引频次合计: 247

摘要: A ca. 600 m-long, 0.5-20 m-wide NW-SE trending granite dike crosscuts the high pressure-low temperature (HP-LT) Tianshan metamorphic belt, the foliation of which is parallel to the main ENE regional trend in the Chinese South Tianshan Orogen. It is mainly composed of plagioclase. K-feldspar, quartz, muscovite, biotite and secondary chlorite, while fluorite, zircon and xenotime occur as accessories. The immediate country rock is a quartz-biotite-plagioclase schist, which grades several tens of meters away from the granite dike into a chlorite-mica-albite schist. The latter schist is intimately intercalated with blueschist layers and boudins. The A/CNK value of the granite dike samples varies from 1.15 to 1.27 indicating a strongly peraluminous composition. CaO/Na2O ranges from 0.06 to 0.17 and Al2O3/TiO2 from 240 to 525, similar to the ratios of strongly peraluminous (SP) granites exposed in 'high-pressure' collision zones such as the Himalayas. A zircon U-Pb age of 285 Ma was obtained for the granite dike, thus constraining the upper limit for the age of HP-LT metamorphism. The petrological and geochemical data suggest that the SP leucogranite dike intruded during the exhumation of overthickened crust in the post-collisional setting between the Yili (-Central Tianshan) and Tarim blocks. The dataset presented here in conjunction with previously published data corroborate that the HP-LT metamorphism must have occurred earlier than the Permian in the Tianshan Orogen. Therefore, the collision between the Yili (-Central Tianshan) and Tarim blocks and the final amalgamation of the Southwestern Altaids must have been terminated in Late Paleozoic and not in Triassic times as previously suggested. (C) 2011 Elsevier B.V. All rights reserved.

入藏号: WOS:000288921300008

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0040-1951

eISSN: 1879-3266

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 371 条，共 381 条

标题: Ophiolite genesis and global tectonics: Geochemical and tectonic fingerprinting of ancient oceanic lithosphere

作者: Dilek, Y (Dilek, Yildirim); Furnes, H (Furnes, Harald)

来源出版物: GEOLOGICAL SOCIETY OF AMERICA BULLETIN 卷: 123 期: 3-4 页: 387-411 DOI: 10.1130/B30446.1 出版年: MAR-APR 2011

Web of Science 核心合集中的 "被引频次": 634

被引频次合计: 729

摘要: Ophiolites, and discussions on their origin and significance in Earth's history, have been instrumental in the formulation, testing, and establishment of hypotheses and theories in earth sciences. The definition, tectonic origin, and emplacement mechanisms of ophiolites have been the subject of a dynamic and continually evolving concept since the nineteenth century. Here, we present a review of these ideas as well as a new classification of ophiolites, incorporating the diversity in their structural architecture and geochemical signatures that results from variations in petrological, geochemical, and tectonic processes during formation in different geodynamic settings. We define ophiolites as suites of temporally and spatially associated ultramafic to felsic rocks related to separate melting episodes and processes of magmatic differentiation in particular tectonic environments. Their geochemical characteristics, internal structure, and thickness vary with spreading rate, proximity to plumes or trenches, mantle temperature, mantle fertility, and the availability of fluids. Subduction-related ophiolites include suprasubduction-zone and volcanic-arc types, the evolution of which is governed by slab dehydration and accompanying metasomatism of the mantle, melting of the subducting sediments, and repeated episodes of partial melting of metasomatized peridotites. Subduction-unrelated ophiolites include continental-margin, midocean-ridge (plume-proximal, plume-distal, and trench-distal), and plume-type (plumeproximal ridge and oceanic plateau) ophiolites that generally have mid-ocean-ridge basalt (MORB) compositions. Subduction-related lithosphere and ophiolites develop during the closure of ocean basins, whereas subduction-unrelated types evolve during rift drift and seafloor spreading. The peak times of ophiolite genesis and emplacement in Earth history coincided with collisional events leading to the construction of supercontinents, continental breakup, and plume-related supermagmatic events. Geochemical and tectonic fingerprinting of Phanerozoic ophiolites within the framework of this new ophiolite classification is an effective tool for identification of the geodynamic settings of oceanic crust formation in Earth history, and it can be extended into Precambrian green-stone belts in order to investigate the ways in which oceanic crust formed in the Archean.

入藏号: WOS:000286665300001

出版商: GEOLOGICAL SOC AMER, INC

出版商地址: PO BOX 9140, BOULDER, CO 80301-9140 USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0016-7606

eISSN: 1943-2674

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 372 条，共 381 条

标题: AGE AND GROWTH OF THE ARCHEAN KONGLING TERRAIN, SOUTH CHINA, WITH EMPHASIS ON 3.3 GA GRANITOID GNEISSES

作者: Gao, S (Gao, Shan); Yang, J (Yang, Jie); Zhou, L (Zhou, Lian); Li, M (Li, Ming); Hu, ZC (Hu, Zhaochu); Guo, JL (Guo, Jingliang); Yuan, HL (Yuan, Honglin); Gong, HJ (Gong, Hujun); Xiao, GQ (Xiao, Gaoqiang); Wei, JQ (Wei, Junqi)

来源出版物: AMERICAN JOURNAL OF SCIENCE 卷: 311 期: 2 页: 153-182 DOI: 10.2475/02.2011.03 出版年: FEB 2011

Web of Science 核心合集中的 "被引频次": 262

被引频次合计: 310

摘要: The North China craton and the Yangtze craton (South China) both contain Archean rocks in eastern China. Unlike the North China craton, where Archean rocks are widespread, in the Yangtze craton the exposed Archean rocks are only known in the Kongling terrain (360 km(2)). Zircon U-Pb ages and Lu-Hf isotopic compositions of three granodioritic-trondhjemitic gneisses and three metasedimentary rocks from the Kongling terrain were analyzed by LA-ICP-MS and LA-MC-ICP-MS. Igneous zircons in one trondhjemitic gneiss in the north of the Kongling terrain have an age of 3302 +/- 7 (1 sigma) Ma. Evidence from cathodoluminescence imaging, variations in Th/U and degree of U-Pb age discordance suggest that apparently younger zircons in the same population are variably disturbed 3302 Ma grains. Thus, this trondhjemitic gneiss is the oldest known rock in South China and predates the earlier reported similar to 2900 Ma granitoid magmatism by 400 Ma. Zircon cores from one granodioritic gneiss in the north of the Kongling terrain also give a concordant age group at 3200 to 3300 Ma. Regardless as inherited or not, these cores crystallized from a magma indistinguishable in age with the trondhjemite. Concordant U-Pb ages for igneous zircons in one granodioritic gneiss in the south of the Kongling terrain yielded a weighted average (206)pb/(207)pb age of 2981 +/- 13 Ma (2 sigma, MSWD=9.7, n=21). The zircon age and initial Hf isotopic compositions are similar to those of widespread granitoid gneisses from the north of the Kongling terrain (2903-2947 Ma), and indicate that the south and north of the Kongling terrain are correlative. The results also reinforce that magmatism of the whole Kongling terrain mainly occurred at 2900 Ma.

Available Hf isotopic data from the Kongling terrain show that juvenile crustal additions occurred mainly between 3150 and 3800 Ma with a significant peak at 3300 to 3500 Ma. The similar to 3300 Ma zircons from the trondhjemitic gneiss have Hf crust formation ages of 3450 to 3730 Ma, some of which have nearly chondritic epsilon(Hf) (t). The whole-rock depleted mantle Nd model age of this rock is 3400 Ma, close to its age of magmatism and consistent with the Hf model age. Its epsilon(Nd) value at 3300 Ma is nearly chondritic (1.26). These lines of evidence suggest that the 3300 Ma trondhjemite represent juvenile crust additions to the pre-existing continental crust.

入藏号: WOS:000290885700003

出版商: AMER JOURNAL SCIENCE

出版商地址: YALE UNIV, PO BOX 208109, NEW HAVEN, CT 06520-8109 USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0002-9599

eISSN: 1945-452X

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 373 条，共 381 条

标题: The Lhasa Terrane: Record of a microcontinent and its histories of drift and growth

作者: Zhu, DC (Zhu, Di-Cheng); Zhao, ZD (Zhao, Zihi-Dan); Niu, YL (Niu, Yaoling); Mo, XX (Mo, Xuan-Xue); Chung, SL (Chung, Sun-Lin); Hou, ZQ (Hou, Zeng-Qian); Wang, LQ (Wang, Li-Quan); Wu, FY (Wu, Fu-Yuan)

来源出版物: EARTH AND PLANETARY SCIENCE LETTERS 卷: 301 期: 1-2 页: 241-255 DOI: 10.1016/j.epsl.2010.11.005 出版年: JAN 3 2011

Web of Science 核心合集中的 "被引频次": 754

被引频次合计: 994

摘要: The Lhasa Terrane in southern Tibet has long been accepted as the last geological block accreted to Eurasia before its collision with the northward drifting Indian continent in the Cenozoic, but its lithospheric architecture, drift and growth histories and the nature of its northern suture with Eurasia via the Qiangtang Terrane remain enigmatic. Using zircon in situ U-Pb and Lu-Hf isotopic and bulk-rock geochemical data of Mesozoic-Early Tertiary magmatic rocks sampled along four north-south traverses across the Lhasa Terrane, we show that the Lhasa Terrane has ancient basement rocks of Proterozoic and Archean ages (up to 2870 Ma) in its centre with younger and juvenile crust (Phanerozoic) accreted towards its both northern and southern edges. This finding proves that the central Lhasa subterrane was once a microcontinent. This continent has survived from its long journey across the Paleo-Tethyan Ocean basins and has grown at the edges through magmatism resulting from oceanic lithosphere subduction towards beneath it during its journey and subsequent collisions with the Qiangtang Terrane to the north and with the Indian continent to the south. Zircon Hf isotope data indicate significant mantle source contributions to the generation of these granitoid rocks (e.g., similar to 50-90%, 0-70%, and 30-100% to the Mesozoic magmatism in the southern, central, and northern Lhasa subterranes, respectively). We suggest that much of the Mesozoic magmatism in the Lhasa Terrane may be associated with the southward Bangong-Nujiang Tethyan seafloor subduction beneath the Lhasa Terrane, which likely began in the Middle Permian (or earlier) and ceased in the late Early Cretaceous, and that the significant changes of zircon epsilon(Hf)(t) at similar to 113 and similar to 52 Ma record tectonomagmatic activities as a result of slab break-off and related mantle melting events following the Qiangtang-Lhasa amalgamation and India-Lhasa amalgamation, respectively. These results manifest the efficacy of zircons as a chronometer (U-Pb dating) and a geochemical tracer (Hf isotopes) in understanding the origin and histories of lithospheric plates and in revealing the tectonic evolution of old orogenies in the context of plate tectonics. (C) 2010 Elsevier B.V. All rights reserved.

入藏号: WOS:000286640400025

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0012-821X

eISSN: 1385-013X

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 374 条，共 381 条

标题: Geochronology of the Mesozoic volcanic rocks in the Great Xing'an Range, northeastern China: Implications for subduction-induced delamination

作者: Zhang, JH (Zhang, Ji-Heng); Gao, S (Gao, Shan); Ge, WC (Ge, Wen-Chun); Wu, FY (Wu, Fu-Yuan); Yang, JH (Yang, Jin-Hui); Wilde, SA (Wilde, Simon A.); Li, M (Li, Ming)

来源出版物: CHEMICAL GEOLOGY 卷: 276 期: 3-4 页: 144-165 DOI: 10.1016/j.chemgeo.2010.05.013 出版年: SEP 2010

Web of Science 核心合集中的 "被引频次": 287

被引频次合计: 400

摘要: Mesozoic volcanic rocks and granitoids are widespread in the Great Xing'an Range, which is part of a large igneous province in the eastern China. However, the ages of the volcanic rocks, especially those in the southern segment of the range, are poorly constrained. Here we present zircon U-Pb and whole rock Ar-Ar ages of 43 volcanic rocks from the four recognized formations (Manketouebo, Manitu, Baiyingaolao and Meiletu) in the southern Great Xing'an Range. The volcanic rocks of the Manketouebo Formation have a large span of ages ranging from 174 to 122 Ma, while those of the Manitu Formation exhibit a smaller age range from 156 to 125 Ma. The Baiyingaolao and Meiletu volcanic rocks both have Early Cretaceous ages between 139 and 124 Ma. These data indicate that the mapped units are not strictly 'formations' and further studies are required to resolve this issue. However, when taken together, these new data define two episodes of magmatism (Late Jurassic and Early Cretaceous) with the Early Cretaceous volcanic rocks being dominant. Combined with previously published data from the northern Great Xing'an Range, and available age data from other parts of northeastern China and surrounding regions, two stages of magmatism, i.e., Jurassic and Early Cretaceous, can be identified throughout this part of Asia. The Jurassic rocks mainly comprise granites, while volcanic rocks are dominant in the Early Cretaceous. These two stages of magmatism form opposite spatial trends, that is, the Jurassic rocks become younger to the west, whereas the Cretaceous rocks become younger to the east. Between the two stages of magmatism, the 'magma gap' increases eastward in duration from less than 10 Ma in the Great Xing'an Range to more than 40 Ma in Japan. These trends can be explained by westward subduction of the Paleo-Pacific oceanic Plate and its control on subsequent geodynamic processes. Jurassic subduction of the oceanic slab caused crustal shortening and thickening, and formed the westward decrease in age of the granites with characteristics of an active continental margin, while volcanism was rare. By the end of the Jurassic, westward flat-slab subduction of the Paleo-Pacific Oceanic plate changed its direction to the north or northwest. This subsequently caused a transformation in tectonic regime from compression to extension in the Cretaceous and induced large-scale delamination of the thickened lower crust and lithospheric mantle. Delamination was initiated at the western margin of the subducting slab, and migrated eastward. Delamination and consequent upwelling of the asthenosphere triggered extensive volcanic eruption, with only minor granite emplacement. Similar age trends are also observed for other parts of eastern China, suggesting this model can also be applied to explain the geodynamic setting of the Mesozoic large igneous events in China and adjacent regions. (C) 2010 Elsevier B.V. All rights reserved.

入藏号: WOS:000282112800002

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0009-2541

eISSN: 1878-5999

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 375 条，共 381 条

标题: Magnesium isotopic composition of the Earth and chondrites

作者: Teng, FZ (Teng, Fang-Zhen); Li, WY (Li, Wang-Ye); Ke, S (Ke, Shan); Marty, B (Marty, Bernard); Dauphas, N (Dauphas, Nicolas); Huang, SC (Huang, Shichun); Wu, FY (Wu, Fu-Yuan); Pourmand, A (Pourmand, Ali)

来源出版物: GEOCHIMICA ET COSMOCHIMICA ACTA 卷: 74 期: 14 页: 4150-4166 DOI: 10.1016/j.gca.2010.04.019 出版年: JUL 15 2010

Web of Science 核心合集中的 "被引频次": 262

被引频次合计: 288

摘要: To constrain further the Mg isotopic composition of the Earth and chondrites, and investigate the behavior of Mg isotopes during planetary formation and magmatic processes, we report high-precision (+/-0.06 parts per thousand on delta Mg-25 and +/-0.07 parts per thousand on delta Mg-26, 2SD) analyses of Mg isotopes for (1) 47 mid-ocean ridge basalts covering global major ridge segments and spanning a broad range in latitudes, geochemical and radiogenic isotopic compositions; (2) 63 ocean island basalts from Hawaii (Kilauea, Koolau and Loihi) and French Polynesia (Society Island and Cook-Austral chain); (3) 29 peridotite xenoliths from Australia, China, France, Tanzania and USA; and (4) 38 carbonaceous, ordinary and enstatite chondrites including 9 chondrite groups (CI, CM, CO, CV, L, LL, H, EH and EL).

Oceanic basalts and peridotite xenoliths have similar Mg isotopic compositions, with average values of delta Mg-25 = -0.13 +/- 0.05 (2SD) and delta(26)mg = -0.26 +/- 0.07 (2SD) for global oceanic basalts (n = 110) and delta Mg-25 = 0.13 +/- 0.03 (2SD) and delta Mg-26 = -0.25 +/- 0.04 (2SD) for global peridotite xenoliths (n = 29). The identical Mg isotopic compositions in oceanic basalts and peridotites suggest that equilibrium Mg isotope fractionation during partial melting of peridotite mantle and magmatic differentiation of basaltic magma is negligible. Thirty-eight chondrites have indistinguishable Mg isotopic compositions, with delta Mg-25 = 0.15 +/- 0.04 (2SD) and delta Mg-26 = 0.28 +/- 0.06 (2SD). The constancy of Mg isotopic compositions in all major types of chondrites suggest that primary and secondary processes that affected the chemical and oxygen isotopic compositions of chondrites did not significantly fractionate Mg isotopes.

Collectively, the Mg isotopic composition of the Earth's mantle, based on oceanic basalts and peridotites, is estimated to be 0.13 +/- 0.04 for delta Mg-25 and 0.25 +/- 0.07 for delta Mg-26 (2SD, n = 139). The Mg isotopic composition of the Earth, as represented by the mantle, is similar to chondrites. The chondritic composition of the Earth implies that Mg isotopes were well mixed during accretion of the inner solar system. (C) 2010 Elsevier Ltd. All rights reserved'.

入藏号: WOS:000278977100019

出版商: PERGAMON-ELSEVIER SCIENCE LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, ENGLAND

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0016-7037

eISSN: 1872-9533

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 376 条，共 381 条

标题: Petrophysical characterization of coals by low-field nuclear magnetic resonance (NMR)

作者: Yao, YB (Yao, Yanbin); Liu, DM (Liu, Dameng); Che, Y (Che, Yao); Tang, DZ (Tang, Dazhen); Tang, SH (Tang, Shuheng); Huang, WH (Huang, Wenhui)

来源出版物: FUEL 卷: 89 期: 7 页: 1371-1380 DOI: 10.1016/j.fuel.2009.11.005 出版年: JUL 2010

Web of Science 核心合集中的 "被引频次": 357

被引频次合计: 396

摘要: Nuclear magnetic resonance (NMR) has been widely used in petrophysical characterization of sandstones and carbonates, but little attention has been paid in the use of this technique to study petrophysical properties of coals, which is essential for evaluating coalbed methane reservoir. In this study, two sets of NMR experiments were designed to study the pore types, pore structures, porosity and permeability of coals. Results show that NMR transverse relaxation (T(2)) distributions strongly relate to the coal pore structure and coal rank. Three T(2) spectrum peaks identified by the relaxation time at 0.5-2.5 ms, 20-50 ms and >100 ms correspond to pores of <0.1 mu m, >0.1 mu m and cleats, respectively, which is consistent with results from computed tomography scan and mercury intrusion porosimetry. Based on calculated producible and irreducible porosities through a T(2) cutoff time method, we propose a new NMR-based permeability model that better estimates the permeability of coals. In combination with mercury intrusion porosimetry, we also propose a NMR-based pore structure model that efficiently estimates the pore size distribution of coals. The new experiments and modeling prove the applicability of NMR in petrophysical characterization of intact coal samples, which has potential applications for NMR well logging in coalbed methane exploration. (C) 2009 Elsevier Ltd. All rights reserved.

入藏号: WOS:000277189100009

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0016-2361

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 377 条，共 381 条

标题: Cenozoic tectonic evolution of Asia: A preliminary synthesis

作者: Yin, A (Yin, An)

来源出版物: TECTONOPHYSICS 卷: 488 期: 1-4 特刊: SI 页: 293-325 DOI: 10.1016/j.tecto.2009.06.002 出版年: JUN 5 2010

Web of Science 核心合集中的 "被引频次": 445

被引频次合计: 527

摘要: Asia has been a major testing ground for various competing models of continental deformation due to its relatively well-understood plate boundary conditions in the Cenozoic, exceptional exposure of active structures, and strain distribution, and widespread syn-collisional igneous activity as a proxy for the thermal state of the mantle and crust. Two Cenozoic orogens dominate the continent: the Himalayan-Tibetan orogen in the east induced by the India-Asia collision and the Turkish-Iranian-Caucasus orogen in the west induced by the Arabia-Asia collision. The development of the two orogens was accomplished by shortening in the early stage followed by strike-slip faulting and extension in the late stage. In the Himalayan-Tibetan orogen, shortening across two discrete thrust belts at 55-30 Ma in southern and northern Tibet created a large intracontinental basin (the Paleo-Qaidam basin) in between. Subsequent crustal thickening and a possible thermal event in the mantle (e.g., convective removal of central Tibetan mantle lithosphere) may have raised the elevation of this early intra-plateau basin up to similar to 2-3 km to its current height. Collision between India and Asia also caused lateral extrusion of southeast Asia between 32 Ma and 17 Ma. The latest stage of the India-Asia collision was expressed by north-trending rifting and the development of trench-facing V-shaped conjugate strike-slip faults in central Mongolia, central Tibet, eastern Afghanistan and southeast Asia. In the Turkish-Iranian-Caucasus orogen, early crustal thickening in the orogenic interior began at or prior to 30-20 Ma. This style of deformation was replaced by strike-slip faulting at similar to 15-5 Ma associated with further northward penetration of Arabia into Asia, westward extrusion of the Anatolia/Turkey block, and rapid extension across the Sea of Crete and Sea of Aegean. The late stage extension in both orogens was locally related to extensional core-complex development. The continental-margin extension of east Asia was developed in two stages: initially in a widely distributed zone that has an east-west width of 500-800 km during 65-35 Ma, which was followed by localized extension and opening of back-arc basins associated with the development of spreading centers at 32-17 Ma (e.g., Japan Sea or East Korea Sea, Bohai Bay, and South China Sea). Opening of the back-arc basins could be induced by (1) rapid eastward migration of the western Pacific trench system or (2) oblique subduction of Pacific plate beneath Asia that had produced a series of en echelon right-slip primary shear zones linking with back-arc spreading centers oriented obliquely to the strike of the nearby trench. Since similar to 15 Ma, the eastern margin of Asia became contractional in the east-west direction, as indicated by the collapse of back-arc basins in the western Pacific and the development of fold-thrust belts along the eastern continental margin. Coeval with the contraction is widespread east-west extension in Siberia, North China, and the Tibetan plateau. The above observations can be explained by a change in boundary condition along the eastern margin of Asia that allowed the thickened Asian continent to spread eastward, causing east-west extension in its trailing edge and east-west compression in its leading edge. In west Asia, continental-margin extension started at about 25-20 Ma in the Aegean and Cretan regions, which was associated with a rapid southward retreat of the Hellenic arc.

The complex evolution of Cenozoic deformation in Asia may be explained by a combined effect of temporal chages in plate boundary conditions, thermal evolution of the upper mantle perturbed by collisional tectonics, and the built-up of gravitational energy through crustal thickening and thermal heating. Although the past research in Asia has treated the India-Asia and Arabia-Asia convergence as separate collisional processes, their interaction may have controlled the far-field Cenozoic deformation in Asia. The most pronounced result of this interaction is the creation of a northeast-trending 300-400-km wide and >1500-km long zone of northwest-striking right-slip faults, which extends from the Zagros thrust belt in the south to western Mongolia in the north and links with the active Tian Shan and Altai Shan intracontinental orogens. Cenozoic deformation and coeval igneous activity spatially overlap with one another in the Himalayan-Tibetan and Turkish-Iranian-Caucasus orogens. A large Cenozoic magmatic gap exists between Tibet in the south and Mongolia in the north where Cenozoic deformation has not been associated with any coeval igneous activity. Finally, Cenozoic igneous activity is always associated with Jurassic-Cretaceous magmatic arcs, suggesting a causal relationship between the early arc magmatism and later syn-collisional magmatism. (C) 2009 Elsevier B.V. All rights reserved.

入藏号: WOS:000279624200020

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0040-1951

eISSN: 1879-3266

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 378 条，共 381 条

标题: Reappraisement and refinement of zircon U-Pb isotope and trace element analyses by LA-ICP-MS

作者: Liu, YS (Liu YongSheng); Hu, ZC (Hu ZhaoChu); Zong, KQ (Zong KeQing); Gao, CG (Gao ChangGui); Gao, S (Gao Shan); Xu, JA (Xu Juan); Chen, HH (Chen HaiHong)

来源出版物: CHINESE SCIENCE BULLETIN 卷: 55 期: 15 页: 1535-1546 DOI: 10.1007/s11434-010-3052-4 出版年: MAY 2010

Web of Science 核心合集中的 "被引频次": 961

被引频次合计: 1471

摘要: A protocol was established for simultaneous measurements of zircon U-Pb ages and trace elements by LA-ICP-MS at spot sizes of 16-32 mu m. This was accomplished by introducing N-2 into ICP to increase the sensitivity. The obtained U-Pb ages for zircon standards GJ-1, TEMORA and SK10-2 are consistent with the preferred values within about 1% uncertainty (2s) by simple external calibration against zircon standard 91500. Different data reduction softwares could yield different uncertainties for calculation of U-Pb ages. The commercially available program GLITTER4.4 could apply an improper uncertainty calculation strategy, but it may yield artificial high precisions for single analyses. Our trace element analyses indicate that Si is not an ideal internal standard for zircon when calibrated against the NIST glasses. Calibration against the NIST glasses using Si as an internal standard, a systematic deviation of 10%-30% was found for most trace elements including Zr. However, the trace element compositions of zircon can be accurately measured by calibration against multiple reference materials with natural compositions ( e. g., BCR-2G, BHVO-2G and BIR-1G), or calibration against NIST SRM 610 and using Zr as an internal standard. Analyses of two pieces of GJ-1 demonstrate that it is relatively homogenous for most trace elements (except for Ti).

入藏号: WOS:000278704100011

出版商: SCIENCE PRESS

出版商地址: 16 DONGHUANGCHENGGEN NORTH ST, BEIJING 100717, PEOPLES R CHINA

Web of Science 类别: Multidisciplinary Sciences

ISSN: 1001-6538

eISSN: 1861-9541

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 379 条，共 381 条

标题: Late Cretaceous charnockite with adakitic affinities from the Gangdese batholith, southeastern Tibet: Evidence for Neo-Tethyan mid-ocean ridge subduction?

作者: Zhang, ZM (Zhang, Zeming); Zhao, GC (Zhao, Guochun); Santosh, M (Santosh, M.); Wang, JL (Wang, Jinli); Dong, X (Dong, Xin); Shen, K (Shen, Kun)

来源出版物: GONDWANA RESEARCH 卷: 17 期: 4 页: 615-631 DOI: 10.1016/j.gr.2009.10.007 出版年: MAY 2010

Web of Science 核心合集中的 "被引频次": 258

被引频次合计: 295

摘要: The Gangdese batholith emplaced during the time span of Cretaceous to Neogene in the southern Lhasa terrane of Tibet has been considered as a major constituent of an Andean-type convergent margin derived from the northward subduction of the Neo-Tethyan oceanic lithosphere under Asia. Whereas previous studies assigned the Gangdese granitoids to be comprised predominantly of calc-alkaline rocks, here we report a suite of charnockites from the eastern part of the belt and characterize their petrology, geochemistry and age. These rocks possess an assemblage of andesine, enstatite, diopside, calcic amphibole, Ti-rich biotite, quartz and minor K-feldspar. Geochemically, they are characterized by intermediate SiO2 (54-63 wt.%). relatively high Al2O3 (15.9-18.9 wt.%), REE (55.7-89.4 ppm) and Sr (419.6-619.4 ppm), and low Y (11.3-17.2 ppm) and Yb (1.2-1.8 ppm) concentrations. The rocks display geochemical affinities similar to those of adakites derived from the partial melting of a subducted slab, and also can be compared to magnesian charnockites formed within a continental magmatic arc. The crystallization conditions of the charnockites were estimated at 900 degrees C and 1.0 GPa. LA-ICP-MS zircon U-Pb analyses of eleven samples yield consistent Pb-206/U-238 weighted mean ages of 86 to 90 Ma, indicating that the charnockites were emplaced in the Late Cretaceous. Considering the coeval calc-alkaline magmatism and high-temperature granulite-facies metamorphism, we propose that such high-temperature and low-H2O activity charnockites were derived through Neo-Tethyan mid-ocean ridge subduction before the collision of India with the Asian continent. (C) 2009 International Association for Gondwana Research. Published by Elsevier B.V. All rights reserved.

入藏号: WOS:000276675700001

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 1342-937X

eISSN: 1878-0571

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 380 条，共 381 条

标题: Characterization of Heteroatom Compounds in a Crude Oil and Its Saturates, Aromatics, Resins, and Asphaltenes (SARA) and Non-basic Nitrogen Fractions Analyzed by Negative-Ion Electrospray Ionization Fourier Transform Ion Cyclotron Resonance Mass Spectrometry

作者: Shi, Q (Shi, Quan); Hou, DJ (Hou, Dujie); Chung, KH (Chung, Keng H.); Xu, CM (Xu, Chunming); Zhao, SQ (Zhao, Suoqi); Zhang, YH (Zhang, Yahe)

来源出版物: ENERGY & FUELS 卷: 24 期: 4 页: 2545-2553 DOI: 10.1021/ef901564e 出版年: APR 2010

Web of Science 核心合集中的 "被引频次": 218

被引频次合计: 236

摘要: A Liaohe crude oil was separated as saturates, aromatics, resins, and asphaltenes (SARA) and neutral nitrogen fractions. The crude oil and its subfractions were analyzed by negative-ion electrospray ionization (ESI) Fourier transform ion cyclotron resonance mass spectrometry (FT-ICR MS). The results show that neutral nitrogen and acidic heteroatom compounds in the crude oil contain 15-55 carbon atoms with double-bond equivalent (DBE) values of 1-27, containing N-1, N-2, N1O1, N1O2, N1O3, N1O4, O-1, and O-2 heteroatom classes. No molecules in the saturate fraction can be ionized by ESI. The aromatic fraction contains N-1 and N1Ox with high molecular weights but low DBE values. The resin and asphaltene fractions contain highly aromatic and acidic class species, which are enriched in oxygen- and nitrogen-containing compounds with lower molecular weights than those found in the aromatic fraction. The distribution patterns of N-1, N1O1, and O-1 class species in the resins and asphaltenes are similar. The mass spectrum of the neutral nitrogen fraction differs from those for the bulk crude oil and its SARA fractions; the neutral nitrogen fraction is enriched with N-1 and N1O1 class species. Neutral nitrogen compounds with molecular weights lower than 200 were discriminated in the FT-ICR MS spectrum under the chosen operating conditions. However, the nitrogen species detected by gas chromatography only accounted for a small amount of that found in the neutral nitrogen fractions. Some of the neutral nitrogen species were entrained in asphaltenes during the deasphalting step of sample fractionation.

入藏号: WOS:000276563300045

会议名称: 10th International Conference on Petroleum Phase Behavior and Fouling

会议日期: JUN, 2009

会议地点: Rio de Janeiro, BRAZIL

出版商: AMER CHEMICAL SOC

出版商地址: 1155 16TH ST, NW, WASHINGTON, DC 20036 USA

Web of Science 类别: Energy & Fuels; Engineering, Chemical

ISSN: 0887-0624

eISSN: 1520-5029

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

第 381 条，共 381 条

标题: Continental and Oceanic Crust Recycling-induced Melt-Peridotite Interactions in the Trans-North China Orogen: U-Pb Dating, Hf Isotopes and Trace Elements in Zircons from Mantle Xenoliths

作者: Liu, YS (Liu, Yongsheng); Gao, S (Gao, Shan); Hu, ZC (Hu, Zhaochu); Gao, CG (Gao, Changgui); Zong, KQ (Zong, Keqing); Wang, DB (Wang, Dongbing)

来源出版物: JOURNAL OF PETROLOGY 卷: 51 期: 1-2 页: 537-571 DOI: 10.1093/petrology/egp082 出版年: JAN-FEB 2010

Web of Science 核心合集中的 "被引频次": 2063

被引频次合计: 3102

摘要: We present the first finding of continental crust-derived Precambrian zircons in garnet/spinel pyroxenite veins within mantle xenoliths carried by the Neogene Hannuoba basalt in the central zone of the North China Craton (NCC). Petrological and geochemical features indicate that these mantle-derived composite xenoliths were formed by silicic melt-lherzolite interaction. The Precambrian zircon ages can be classified into three age groups of 2 center dot 4-2 center dot 5 Ga, 1 center dot 6-2 center dot 2 Ga and 0 center dot 6-1 center dot 2 Ga, coinciding with major geological events in the NCC. These Precambrian zircons fall in the field of continental granitoid rocks in plots of U/Yb vs Hf and Y. Their igneous-type REE patterns and metamorphic zircon type CL images indicate that they were not crystallized during melt-peridotite interaction and subsequent high-pressure metamorphism. The similar to 2 center dot 5 Ga zircons have positive epsilon(Hf(t)) values (2 center dot 9-10 center dot 6), whereas the younger Precambrian zircons are dominated by negative epsilon(Hf(t)) values, indicating an ancient continental crustal origin. These observations suggest that the Precambrian zircons were xenocrysts that survived melting of recycled continental crustal rocks and were then injected with silicate melt into the host peridotite. In addition to the Precambrian zircons, igneous zircons of 315 +/- 3 Ma (2 Sigma), 80-170 Ma and 48-64 Ma were separated from the garnet/spinel pyroxenite veins; these provide evidence for lower continental crust and oceanic crust recycling-induced multi-episodic melt-peridotite interactions in the central zone of the NCC. The combination of the positive epsilon(Hf(t)) values (2 center dot 91-24 center dot 6) of the 315 Ma zircons with the rare occurrence of 302-324 Ma subduction-related diorite-granite plutons in the northern margin of the NCC implies that the 315 Ma igneous zircons might record melt-peridotite interactions in the lithospheric mantle induced by Palaeo-Asian oceanic crust subduction. Igneous zircons of age 80-170 Ma generally coexist with the Precambrian metamorphic zircons and have lower Ce/Yb and Th/U ratios, higher U/Yb ratios and greater negative Eu anomalies. The epsilon(Hf(t)) values of these zircons vary greatly from -47 center dot 6 to 24 center dot 6. The 170-110 Ma zircons are generally characterized by negative epsilon(Hf(t)) values, whereas the 110-100 Ma zircons have positive epsilon(Hf(t)) values. These observations suggest that melt-peridotite interactions at 80-170 Ma were induced by partial melting of recycled continental crust. The 48-64 Ma igneous zircons are characterized by negligible Ce anomalies, unusually high REE, U and Th contents, and positive epsilon(Hf(t)) values. These features imply that the melt-peridotite interactions at 48-64 Ma could be associated with a depleted mantle-derived carbonate melt or fluid.

入藏号: WOS:000273893000023

会议名称: 5th Lherzolite Conference

会议日期: SEP, 2008

会议地点: Shasta City, CA

出版商: OXFORD UNIV PRESS

出版商地址: GREAT CLARENDON ST, OXFORD OX2 6DP, ENGLAND

Web of Science 类别: Geochemistry & Geophysics

ISSN: 0022-3530

eISSN: 1460-2415

ESI 高被引论文: Y

ESI 热点论文: N

输出日期: 2021-01-16

**热点论文：**

第 1 条，共 7 条

标题: Exergoeconomic optimization of a new double-flash geothermal-based combined cooling and power (CCP) system at two different cooling temperatures assisted by boosters

作者: Tian, MW (Tian, Man-Wen); Parikhani, T (Parikhani, Towhid); Jermsittiparsert, K (Jermsittiparsert, Kittisak); Ashraf, MA (Ashraf, Muhammad Aqeel)

来源出版物: JOURNAL OF CLEANER PRODUCTION 卷: 261 文献号: 120921 DOI: 10.1016/j.jclepro.2020.120921 出版年: JUL 10 2020

Web of Science 核心合集中的 "被引频次": 22

被引频次合计: 22

摘要: A new cooling/power cogeneration system applicable to double-flash geothermal power plants is devised which provides cooling load at two different adjustable cooling temperatures. To further increase efficiency of the set-up, two boosters are employed to boost pressure of the secondary flow of each ejector due to the considerable drop of pressure of the geofluid through the steam turbines as well as the throttling valves. A comprehensive modeling of the proposed system is achieved from thermodynamics laws as well as economic perspectives and the results are elaborated with more details. In comparison with the previous integrated systems based on the flash geothermal power plants, the present system produces around 47.8% more cooling load and 38.9% more electricity. Also, the results of multi-objective optimization revealed that the net electrical power and exergetic efficiency can be increased approximately 20.59% and 68.11%, respectively. However, the unit cost of power and cooling (UCPC) is decreased around 36.3%. Meantime, the total exergy destruction rate is decreased after optimization. Among all elements, the highest exergy destruction occurred in the condenser by 2570 kW out of 7609 kW (in base mode) and 2333 kW out of 6836 kW (in optimum mode). Also, it is found that the energy efficiency of the proposed system can be increased by increasing turbines outlet pressure, boosters pressure ratio, and separator 1 pressure or decreasing separator 2 pressure. (C) 2020 Elsevier Ltd. All rights reserved.

入藏号: WOS:000533538400002

出版商: ELSEVIER SCI LTD

出版商地址: THE BOULEVARD, LANGFORD LANE, KIDLINGTON, OXFORD OX5 1GB, OXON, ENGLAND

Web of Science 类别: Green & Sustainable Science & Technology; Engineering, Environmental; Environmental Sciences

ISSN: 0959-6526

eISSN: 1879-1786

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16

第 2 条，共 7 条

标题: Knowledge, attitudes, and practices towards COVID-19 among Chinese residents during the rapid rise period of the COVID-19 outbreak: a quick online cross-sectional survey

作者: Zhong, BL (Zhong, Bao-Liang); Luo, W (Luo, Wei); Li, HM (Li, Hai-Mei); Zhang, QQ (Zhang, Qian-Qian); Liu, XG (Liu, Xiao-Ge); Li, WT (Li, Wen-Tian); Li, Y (Li, Yi)

来源出版物: INTERNATIONAL JOURNAL OF BIOLOGICAL SCIENCES 卷: 16 期: 10 页: 1745-1752 DOI: 10.7150/ijbs.45221 出版年: 2020

Web of Science 核心合集中的 "被引频次": 266

被引频次合计: 273

摘要: Unprecedented measures have been adopted to control the rapid spread of the ongoing COVID-19 epidemic in China. People's adherence to control measures is affected by their knowledge, attitudes, and practices (KAP) towards COVID-19. In this study, we investigated Chinese residents' KAP towards COVID-19 during the rapid rise period of the outbreak. An online sample of Chinese residents was successfully recruited via the authors' networks with residents and popular media in Hubei, China. A self-developed online KAP questionnaire was completed by the participants. The knowledge questionnaire consisted of 12 questions regarding the clinical characteristics and prevention of COVID-19. Assessments on residents' attitudes and practices towards COVID-19 included questions on confidence in winning the battle against COVID-19 and wearing masks when going out in recent days. Among the survey completers (n=6910), 65.7% were women, 63.5% held a bachelor degree or above, and 56.2% engaged in mental labor. The overall correct rate of the knowledge questionnaire was 90%. The majority of the respondents (97.1%) had confidence that China can win the battle against COVID-19. Nearly all of the participants (98.0%) wore masks when going out in recent days. In multiple logistic regression analyses, the COVID-19 knowledge score (OR: 0.75-0.90, P<0.001) was significantly associated with a lower likelihood of negative attitudes and preventive practices towards COVID-2019. Most Chinese residents of a relatively high socioeconomic status, in particular women, are knowledgeable about COVID-19, hold optimistic attitudes, and have appropriate practices towards COVID-19. Health education programs aimed at improving COVID-19 knowledge are helpful for Chinese residents to hold optimistic attitudes and maintain appropriate practices. Due to the limited sample representativeness, we must be cautious when generalizing these findings to populations of a low socioeconomic status.

入藏号: WOS:000522973800011

PubMed ID: 32226294

出版商: IVYSPRING INT PUBL

出版商地址: PO BOX 4546, LAKE HAVEN, NSW 2263, AUSTRALIA

Web of Science 类别: Biochemistry & Molecular Biology; Biology

ISSN: 1449-2288

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16

第 3 条，共 7 条

标题: Coseismic Rupture Process of the Large 2019 Ridgecrest Earthquakes From Joint Inversion of Geodetic and Seismological Observations

作者: Liu, CL (Liu, Chengli); Lay, T (Lay, Thorne); Brodsky, EE (Brodsky, Emily E.); Dascher-Cousineau, K (Dascher-Cousineau, Kelian); Xiong, X (Xiong, Xiong)

来源出版物: GEOPHYSICAL RESEARCH LETTERS 卷: 46 期: 21 页: 11820-11829 DOI: 10.1029/2019GL084949 提前访问日期: NOV 2019 出版年: NOV 16 2019

Web of Science 核心合集中的 "被引频次": 36

被引频次合计: 36

摘要: On 4 and 6 July 2019, two large strike-slip earthquakes with W-phase moment magnitudes M-WW 6.5 (foreshock) and M-WW 7.1 (mainshock) struck the Eastern California Shear Zone, northeast of Ridgecrest. The faulting geometry and kinematic coseismic slip distribution of both events are determined by jointly inverting seismological and geodetic observations guided by aftershock and surface rupture locations. The foreshock ruptured two orthogonal faults with a prominent L-shaped geometry with maximum slip of similar to 1.1 m on the NE-SW segment. The mainshock faulting extended NW-SE along several primary fault segments that straddle the foreshock slip. The surface rupture and slip model indicate mostly near-horizontal strike-slip motion with maximum slip of similar to 3.7 m, but there is a localized vertical dip-slip motion. Both the foreshock and mainshock ruptures terminate in regions of complex surface offsets. High aftershock productivity and low rupture velocity may be the result of rupture of a relatively immature fault system.

Plain Language Summary Two large earthquakes on 4 July 2019 (magnitude 6.5) and 6 July 2019 (magnitude 7.1) struck northeast of Ridgecrest, California. Earthquakes such as the 1995 Ridgecrest earthquake have occurred previously in this broad region, called the Eastern California Shear Zone, but the deformation is not concentrated into a dominant single fault. The first rupture involved slip on two perpendicular faults, one aligned NE-SW and the other NW-SE, with slip and aftershocks forming an Lshaped pattern. Most slip was on the NE-SW fault. The mainshock ruptured a sequence of NW-SE trending faults, with slip extending across the short NW-SE segment ruptured in the foreshock. Both ruptures were delimited by zones of multiple surface fractures. The rupture for the mainshock expanded relatively slowly with low radiated energy, and a large number of aftershocks occurred, suggesting rupture of an immature segmented fault system.

入藏号: WOS:000494927500001

出版商: AMER GEOPHYSICAL UNION

出版商地址: 2000 FLORIDA AVE NW, WASHINGTON, DC 20009 USA

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0094-8276

eISSN: 1944-8007

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16

第 4 条，共 7 条

标题: A Hybrid Deep Learning-Based Model for Anomaly Detection in Cloud Datacenter Networks

作者: Garg, S (Garg, Sahil); Kaur, K (Kaur, Kuljeet); Kumar, N (Kumar, Neeraj); Kaddoum, G (Kaddoum, Georges); Zomaya, AY (Zomaya, Albert Y.); Ranjan, R (Ranjan, Rajiv)

来源出版物: IEEE TRANSACTIONS ON NETWORK AND SERVICE MANAGEMENT 卷: 16 期: 3 页: 924-935 DOI: 10.1109/TNSM.2019.2927886 出版年: SEP 2019

Web of Science 核心合集中的 "被引频次": 40

被引频次合计: 40

摘要: With the emergence of the Internet-of-Things (IoT) and seamless Internet connectivity, the need to process streaming data on real-time basis has become essential. However, the existing data stream management systems are not efficient in analyzing the network log big data for real-time anomaly detection. Further, the existing anomaly detection approaches are not proficient because they cannot be applied to networks, are computationally complex, and suffer from high false positives. Thus, in this paper a hybrid data processing model for network anomaly detection is proposed that leverages grey wolf optimization (GWO) and convolutional neural network (CNN). To enhance the capabilities of the proposed model, GWO and CNN learning approaches were enhanced with: 1) improved exploration, exploitation, and initial population generation abilities and 2) revamped dropout functionality, respectively. These extended variants are referred to as Improved-GWO (ImGWO) and Improved-CNN (ImCNN). The proposed model works in two phases for efficient network anomaly detection. In the first phase, ImGWO is used for feature selection in order to obtain an optimal trade-off between two objectives, i.e., reduced error rate and feature-set minimization. In the second phase, ImCNN is used for network anomaly classification. The efficacy of the proposed model is validated on benchmark (DARPA'98 and KDD'99) and synthetic datasets. The results obtained demonstrate that the proposed cloud-based anomaly detection model is superior in comparison to the other state-of-the-art models (used for network anomaly detection), in terms of accuracy, detection rate, false positive rate, and F-score. In average, the proposed model exhibits an overall improvement of 8.25%, 4.08%, and 3.62% in terms of detection rate, false positives, and accuracy, respectively; relative to standard GWO with CNN.

入藏号: WOS:000485689000011

出版商: IEEE-INST ELECTRICAL ELECTRONICS ENGINEERS INC

出版商地址: 445 HOES LANE, PISCATAWAY, NJ 08855-4141 USA

Web of Science 类别: Computer Science, Information Systems

ISSN: 1932-4537

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16

第 5 条，共 7 条

标题: Organic-matter-rich shales of China

作者: Zou, CN (Zou, Caineng); Zhu, RK (Zhu, Rukai); Chen, ZQ (Chen, Zhong-Qiang); Ogg, JG (Ogg, James G.); Wu, ST (Wu, Songtao); Dong, DZ (Dong, Dazhong); Qiu, Z (Qiu, Zhen); Wang, YM (Wang, Yuman); Wang, L (Wang, Lan); Lin, SH (Lin, Senhu); Cui, JW (Cui, Jingwei); Su, L (Su, Ling); Yang, Z (Yang, Zhi)

来源出版物: EARTH-SCIENCE REVIEWS 卷: 189 页: 51-78 DOI: 10.1016/j.earscirev.2018.12.002 出版年: FEB 2019

Web of Science 核心合集中的 "被引频次": 61

被引频次合计: 65

摘要: Organic-matter-rich shales are the main target rocks for unconventional oil and gas exploration and development across the world. In China, shale-gas geological resources are estimated as approximately 110 x 10(12) m(3), with recoverable gas reserves of ca. 20 x 10(12) m(3). Recoverable shale-oil reserves are estimated as ca. 5 x 10(9) t. A total 35 important organic-matter-rich shale units have been recognized from Mesoproterozoic to Cenozoic strata across the entire China. These shales are categorized according to their origin under marine, marine-nonmarine transitional and lacustrine conditions. Shales of marine origin, with ca. 9 x 10(12) m(3) recoverable resources, dominate China's potential in terms of total volume of organic-carbon. Currently, the most favorable marine shales for oil and gas exploration are found in the Sichuan Basin within the lower Cambrian Qiongzhusi Formation and in the Wufeng-Longmaxi formations of uppermost Ordovician through lower Silurian. A fortuitous combination of of sea-level variations, of paleo-productivity, of tectonic activity causing development and migration of partially closed deep basin depocenters, and of sediment accumulation rates controlled the extensive deposition and distribution of organic-matter-rich shales in these Wufeng and Longmaxi formations. Organic-matter-rich shales in marine-nonmarine transitional facies associated with coal measures occur in North China within the Carboniferous and Permian, and in South China within the Permian. These Carboniferous Permian organic-matter-rich shales are important source rocks for the gas fields in the Ordos and Sichuan Basins. Abundant organic-rich shales are also widely distributed within coal-bearing elastics and coal-measure shales of fluvial, lacustrine, and swamp facies in Upper Triassic to Middle Jurassic successions of many basins. Lacustrine organic-rich shales were deposited during the Permian through Neogene in various freshwater to saline lake settings. Lacustrine organic-matter-rich shales are the main oil source rocks in the Songliao, Bohai Bay, Ordos and Junggar basins. Lacustrine algae contributed to the rain of organic matter; and the preservation of organic matter and distribution of organic-rich shale was controlled by lake currents, water depth and oxygen-poor conditions, with enhanced preservation when buried by turbidity currents. Algal blooms were partly induced by trace nutrients from volcanic ash falls in all of these lacustrine basins. Seawater intrusion into the freshwater lake of the Songliao Basin promoted some episodes of black shales. Saline lacustrine basins, such as middle Permian Junggar Basin, contain organic-rich dolomite mudstone that mainly formed during hot climate conditions when the lakes had high salinity and stratified water columns that deprived the bottom waters of oxygen, thereby preserving massive amounts of organic matter. Laminated calcite-rich mudstone in the saline lacustrine settings formed in more brackish waters under stable warm conditions and weak biological activity. The modeling of the factors controlling the distribution of organic-matter-rich shales within China's basins is important for the exploration and development of unconventional oil and gas resources.

入藏号: WOS:000462692600004

出版商: ELSEVIER

出版商地址: RADARWEG 29, 1043 NX AMSTERDAM, NETHERLANDS

Web of Science 类别: Geosciences, Multidisciplinary

ISSN: 0012-8252

eISSN: 1872-6828

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16

第 6 条，共 7 条

标题: Current status and geological conditions for the applicability of CBM drilling technologies in China: A review

作者: Tao, S (Tao, Shu); Pan, ZJ (Pan, Zhejun); Tang, SL (Tang, Shuling); Chen, SD (Chen, Shida)

来源出版物: INTERNATIONAL JOURNAL OF COAL GEOLOGY 卷: 202 页: 95-108 DOI: 10.1016/j.coal.2018.11.020 出版年: FEB 1 2019

Web of Science 核心合集中的 "被引频次": 67

被引频次合计: 68

摘要: Coalbed methane (CBM) drilling technology is critical in achieving efficient CBM development. The geological conditions for CBM development in China are complex, including special terrain, high-rank coal areas, deep coal seams, multiple superposed coal seams and coal measure gas symbiosis areas, steeply inclined coal seam areas, and tectonic coal seam areas. Therefore, it is critical to apply the optimum drilling technology in each different area. This paper first reviews the current CBM drilling technologies and gas production behaviors in China. It is found that although vertical wells and cluster well groups are common well types for CBM development in China, U-, V- and L- shaped horizontal wells and multilateral horizontal wells have been favored for CBM development in recent years. The paper then discusses the applicability of different well types to geological conditions and proposes a modification method for well design in various geologic conditions. This method uses the coal structure, R-o, in situ stress, and ratio of critical desorption pressure to the reservoir pressure as the main inputs.

入藏号: WOS:000460492700008

出版商: ELSEVIER SCIENCE BV

出版商地址: PO BOX 211, 1000 AE AMSTERDAM, NETHERLANDS

Web of Science 类别: Energy & Fuels; Geosciences, Multidisciplinary

ISSN: 0166-5162

eISSN: 1872-7840

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16

第 7 条，共 7 条

标题: All-inorganic perovskite nanocrystal scintillators

作者: Chen, QS (Chen, Qiushui); Wu, J (Wu, Jing); Ou, XY (Ou, Xiangyu); Huang, BL (Huang, Bolong); Almutlaq, J (Almutlaq, Jawaher); Zhumekenov, AA (Zhumekenov, Ayan A.); Guan, XW (Guan, Xinwei); Han, SY (Han, Sanyang); Liang, LL (Liang, Liangliang); Yi, ZG (Yi, Zhigao); Li, J (Li, Juan); Xie, XJ (Xie, Xiaoji); Wang, Y (Wang, Yu); Li, Y (Li, Ying); Fan, DY (Fan, Dianyuan); Teh, DBL (Teh, Daniel B. L.); All, AH (All, Angelo H.); Mohammed, OF (Mohammed, Omar F.); Bakr, OM (Bakr, Osman M.); Wu, T (Wu, Tom); Bettinelli, M (Bettinelli, Marco); Yang, HH (Yang, Huanghao); Huang, W (Huang, Wei); Liu, XG (Liu, Xiaogang)

来源出版物: NATURE 卷: 561 期: 7721 页: 88-93 DOI: 10.1038/s41586-018-0451-1 出版年: SEP 6 2018

Web of Science 核心合集中的 "被引频次": 282

被引频次合计: 290

摘要: The rising demand for radiation detection materials in many applications has led to extensive research on scintillators(1-3). The ability of a scintillator to absorb high-energy (kiloelectronvolt-scale) X-ray photons and convert the absorbed energy into low-energy visible photons is critical for applications in radiation exposure monitoring, security inspection, X-ray astronomy and medical radiography(4,5). However, conventional scintillators are generally synthesized by crystallization at a high temperature and their radioluminescence is difficult to tune across the visible spectrum. Here we describe experimental investigations of a series of all-inorganic perovskite nanocrystals comprising caesium and lead atoms and their response to X-ray irradiation. These nanocrystal scintillators exhibit strong X-ray absorption and intense radioluminescence at visible wavelengths. Unlike bulk inorganic scintillators, these perovskite nanomaterials are solution-processable at a relatively low temperature and can generate X-ray-induced emissions that are easily tunable across the visible spectrum by tailoring the anionic component of colloidal precursors during their synthesis. These features allow the fabrication of flexible and highly sensitive X-ray detectors with a detection limit of 13 nanograys per second, which is about 400 times lower than typical medical imaging doses. We show that these colour-tunable perovskite nanocrystal scintillators can provide a convenient visualization tool for X-ray radiography, as the associated image can be directly recorded by standard digital cameras. We also demonstrate their direct integration with commercial flat-panel imagers and their utility in examining electronic circuit boards under low-dose X-ray illumination.

入藏号: WOS:000443755200037

PubMed ID: 30150772

出版商: NATURE PUBLISHING GROUP

出版商地址: MACMILLAN BUILDING, 4 CRINAN ST, LONDON N1 9XW, ENGLAND

Web of Science 类别: Multidisciplinary Sciences

ISSN: 0028-0836

eISSN: 1476-4687

ESI 高被引论文: Y

ESI 热点论文: Y

输出日期: 2021-01-16