



ISSN 0371-5736



GEOLOGICAL REVIEW

第 68 卷 第 6 期

Vol.68 No.6

2022

热烈庆祝中国地质学会百年华诞



中国地质学会
《地质论评》编辑委员会
科学出版社

主办
编辑
出版



地质论评

2022年 第68卷 第6期 目次

问题讨论

- 华南鹰扬关构造带的大地构造属性与构造演化过程:基于构造解析的认识 夏元,陈家驹,徐先兵(2005)
- 怒江断裂带邦达断裂中段全新世活动证据及其古地震记录 钟宁,杨镇,张献兵,丁莹莹,吴瑞安,王炆,郭长宝,李海兵(2021)
- 胶东福山—栖霞多金属成矿带成矿岩体成因机制及构造背景 朱学强,秦杰,郭晶,黄永波,王丽娟,王金光(2033)
- 小秦岭地区古元古代晚期花岗岩的 LA-ICP-MS U-Pb 年龄、地球化学特征及其构造意义 许晨,陈衍景,周振菊(2053)
- 冈底斯成矿带西段则不吓铅锌矿床钾长花岗岩年代学、地球化学及地质意义 杜保峰,何凯,杨长青,蔡志超,鲁培庆,耿爱宾(2075)
- 辽宁阜新北部地区早侏罗世花岗岩 LA-ICP-MS 锆石 U-Pb 年龄、地球化学特征及铷矿化 彭游博,刘文彬,姚玉健,赵军,谢忠,骆念岗(2089)
- 大兴安岭北段诺敏大山地区早白垩世侵入岩地球化学特征及其构造意义 任永健,张成信,张明明,程烁,高立湧,于汪,赵寒,王畅,张伟胜(2103)
- 西准噶尔乌什加嘎衣提金矿带细斑岩脉及矿石等锆石 U-Pb 年龄、Hf 同位素以及地球化学特征 杨清茂,师志龙,杨文龙,王元元(2115)
- 小兴安岭孙吴地区下白垩统美丰组火山岩年代学和岩石地球化学研究 岳洪举,陆胜,于庆洋,翟艳超,张庆(2138)
- 黔中—渝南岩溶型铝土矿含矿岩系特征、控制条件及生成发展模式 刘平,韩忠华,聂坤(2147)
- 渤海湾盆地东营凹陷南坡东段孔二段烃源岩生排烃潜力分析 王玉伟,刘惠民,焦红岩,王学军,路智勇,赵海燕,刘金友,陈红汉(2175)
- 沉积岩中自生浊沸石的形成、分布及油气意义——以鄂尔多斯盆地中—上三叠统延长组为例 王龙,邓秀芹,楚美娟,张忠义,任肇才,刘广林,张文静,齐亚林(2188)
- 苏南地区地下水化学特征及演化分析 龚亚兵,龚绪龙,许书刚,唐鑫,苏东,吴夏懿(2207)
- 岩性和种植年限对火龙果地土壤碳、氮、磷生态化学计量特征的影响 易芬,邓艳,洪涛,谢运球,吴松,柯静(2219)

研究进展

- 许氏创孔海百合 *Traumatocrinus hsui* 的形态定量分析和个体发育过程 俞银银,贺箫,秦燕娇,史振华,冉维宇,李丙霞,罗永明,喻美艺(2233)
- 郟卢断裂南段怀远—池河北西向断裂的第四纪活动性——来自韭山东北缘的地质证据 方良好,路硕,疏鹏,潘浩波,戚浩,王扬帆,汪凡(2248)
- 山东淄博金岭地区辛庄铁矿地质地球物理特征及深部找矿预测 张保涛,胡兆国,梅贞华,王向伟,魏正宇,郑岩岩,赵晓博,陈磊,胡创业(2259)
- 海南岛北部全新世最大海侵古岸线的发现及其意义 张磊,王超群,麦发海,贾丽云,孙东霞,张耀玲,杨肖肖,韩建恩,韩帅,吕同艳,杜建军,赵希涛,胡道功(2269)
- 接触变质作用对煤基石墨烯量子点的影响研究 樊江涛,唐跃刚,宋晓夏,王绍清,李瑞青,董敏(2277)

科技述评

- 岩性识别:方法、现状及智能化发展趋势 许振浩,马文,李术才,林鹏,梁锋,许广璐,李珊,韩涛,石恒(2290)
- 流体包裹体研究进展及其在矿床学中的应用 李晓东,张艳,韩润生,王磊,吴建标,成功(2305)

专题细解

- 青海赛什腾地区遥感影像岩石信息提取研究 林海星,程三友,王曦,陈静,辜平阳,庄玉军,赵欣怡,马刚(2319)
- 高分遥感数据在胶东水道地区金成矿远景区圈定中的应用研究 邹键,唐文龙,王凤华,胡峰,薄军委,王志新,刘治,魏绪峰,李勇(2336)
- WorldView-3 遥感数据在巴音戈壁盆地本巴图地区铀矿勘查中的应用 童勤龙,叶发旺,秦明宽,易敏,伍炜超(2348)
- 多源遥感数据在新疆卡拉麦里地区岩矿识别中的应用 张昭,陈川,李云鹏(2365)
- 巴基斯坦山达克矿区 ASTER 遥感数据蚀变信息提取及找矿预测 刘磊,蒲小楠,洪俊,张辉善,YASIR Shaheen Khalil(2381)

广东阳江盆地遥感数据地温反演及地热异常靶区圈定 唐海,张代磊,周文纳(2396)

通 讯 资 料 · 消 息 报 道 · 新 书 介 绍

| | |
|--|-------------|
| 中国地质学会公布第二批地质文化村(镇)评定结果 | (2073) |
| 中国地质学会公布第十一届“黄汲清青年地质科学技术奖”评选结果 | (2088) |
| 中国地质学会公布首批会士名单 | (2102) |
| 中国地质学会公布首批荣誉会士名单 | (2218) |
| 中国地质学会公布2022年度创新基地(首批)评选结果 | (2232,2289) |
| 中国地质学会公布第二批天然富硒土地认定结果 | (2409) |
| 辽宁东部地区桥头组微生物诱发沉积构造(MISS)的发现及意义 | |
| 吴子杰,张德明,范海滨,张国仁,邱隆伟,王海鹏,仲米山,耿树峰,郑伟,高福亮,赵汉卿 | (2405) |
| 新书介绍1 | (2411) |
| 新书介绍2 | (2411) |
| 《地质论评》2022年第68卷总目次 | (2411) |
| 《地质论评》2022年第68卷第一作者索引 | (2424) |

(本期执行总编辑 刘志强、章雨旭 版式设计及排版 刘志强、章雨旭)

《地质论评》编辑委员会

Editorial Committee of *GEOLOGICAL REVIEW*

主 编 **Editor in Chief:** 杨文采 YANG Wencai

副主编(以姓氏拼音字母为序) **Deputy Editor in Chief:**

| | | | |
|---------------------|--------------------|------------------|-------------------|
| 陈衍景 CHEN Yanjing | 董云鹏 DONG Yunpeng | 谢树成 XIE Shucheng | 阎长虹 YAN Changhong |
| 张拴宏 ZHANG Shuanhong | 章雨旭(常务) ZHANG Yuxu | 朱祥坤 ZHU Xiangkun | 朱筱敏 ZHU Xiaomin |

委 员(以姓氏拼音字母为序) **Members of Editorial Committee:**

| | | | |
|--------------------|--------------------|---------------------|--------------------|
| 陈汉林 CHEN Hanlin | 陈建平 CHEN Jianping | 陈仁义 CHEN Renyi | 陈伟海 CHEN Weihai |
| 陈孝红 CHEN Xiaohong | 陈衍景 CHEN Yanjing | 董大忠 DONG Dazhong | 董云鹏 DONG Yunpeng |
| 范洪海 FAN Honghai | 付水兴 FU Shuixing | 郝爱兵 HAO Aibing | 何幼斌 HE Youbin |
| 侯明才 HOU Mingcai | 黄智龙 HUANG Zhilong | 金章东 JIN Zhangdong | 李怀坤 LI Huaikun |
| 李金发 LI Jinfa | 李旭平 LI Xuping | 刘 财 LIU Cai | 刘成林 LIU Chenglin |
| 刘传正 LIU Chuanzheng | 刘志飞 LIU Zhifei | 楼章华 LOU Zhanghua | 陆建军 LU Jianjun |
| 吕洪波 LÜ Hongbo | 马生明 MA Shengming | 马永生 MA Yongsheng | 彭建堂 PENG Jiantang |
| 邱隆伟 QIU Longwei | 邵龙义 SHAO Longyi | 沈树忠 SHEN Shuzhong | 石建省 SHI Jiansheng |
| 唐 烽 TANG Feng | 唐菊兴 TANG Juxing | 汪筱林 WANG Xiaolin | 王 剑 WANG Jian |
| 王 焰 WANG Yan | 王焰新 WANG Yanxin | 王宗起 WANG Zhongqi | 魏海泉 WEI Haiquan |
| 武 强 WU Qiang | 谢树成 XIE Shucheng | 徐学义 XU Xueyi | 闫 峻 YAN Jun |
| 阎长虹 YAN Changhong | 杨文采 YANG Wencai | 杨振宇 YANG Zhenyu | 叶建良 YE Jianliang |
| 叶思源 YE Siyuan | 张传林 ZHANG Chuanlin | 张发旺 ZHANG Fawang | 张宏福 ZHANG Hongfu |
| 张建新 ZHANG Jianxin | 张茂省 ZHANG Maosheng | 张拴宏 ZHANG Shuanhong | 张忠慧 ZHANG Zhonghui |
| 章雨旭 ZHANG Yuxu | 朱弟成 ZHU Dicheng | 朱立新 ZHU Lixin | 朱祥坤 ZHU Xiangkun |
| 朱筱敏 ZHU Xiaomin | | | |

《地质论评》编辑部 **Editorial Department of *GEOLOGICAL REVIEW***

编辑部主任 **Chief Editor of the Department** 刘志强 LIU Zhiqiang

编辑部成员 (以姓氏拼音字母为序) **Members of Editorial Department**

| | | | |
|------------------|----------------|-----------------|------------------|
| 蔡志慧 CAI Zhihui | 方 向 FANG Xiang | 费红彩 FEI Hongcai | 高作宇 GAO Zuoyu |
| 郭现轻 GUO Xianqing | 李 明 LI Ming | 刘 萌 LIU Meng | 刘志强 LIU Zhiqiang |
| 潘 静 PAN Jing | 吴 蕾 WU Lei | 章雨旭 ZHANG Yuxu | 周 健 ZHOU Jian |

GEOLOGICAL REVIEW

Vol. 68 No. 6 2022

CONTENTS

Scholarly Discussion

- Tectonic nature and evolution of the Yingyanguan tectonic belt, South China: Constrains from structural analysis XIA Yuan, CHEN Jiaju, XU Xianbing (2020)
- Evidence of Holocene activity and paleoseismic records in the central section of Bangda fault in Nujiang fault zone ZHONG Ning, YANG Zhen, ZHANG Xianbing, DING Yingying, WANG Yang, WU Ruian, GUO Changbao, LI Haibing (2032)
- Genetic mechanism and tectonic settings of the metallogenic granodiorite porphyries from Fushan—Qixia polymetallic metallogenic belt, Jiaodong Peninsula ZHU Xueqiang, QIN Jie, GUO Jing, HUANG Yongbo, WANG Lijuan, WANG Jinguang (2051)
- LA-ICP-MS U-Pb ages and geochemical characteristics of the Late Paleoproterozoic granitoids in Lesser Qinling Mountains and their tectonic significance XU Chen, CHEN Yanjing, ZHOU Zhenju (2072)
- Geochronology, geochemistry and geological significance of the K-feldspar granite porphyry from Zebuxia Pb—Zn deposit, Xizang (Tibet) DU Baofeng, HE Kai, YANG Changqing, CHAI Zhichao, LU Peiqing, GENG Aibin (2087)
- LA-ICP-MS zircon U-Pb dating, geochemical characteristics of the Early Jurassic granite in northern Fuxin area, Liaoning, and rubidium mineralization PENG Youbo, LIU Wenbin, YAO Yujian, ZHAO Jun, XIE Zhong, LUO Niangang (2101)
- Geochemical characteristics and tectonic significance of Early Cretaceous intrusions in the Mount Nuomin area, northern Great Hinggan Mountains REN Yongjian, ZHANG Chengxin, ZHANG Mingming, CHENG Shuo, GAO Liyong, YU Wang, ZHAO Han, WANG Chang, ZHANG Weisheng (2114)
- Zircon U-Pb age, Hf isotope and Geochemical features of the felsophyre dyke and ores in Wushenjiagayiti gold deposit, western Junggar, Xinjiang YANG Qingmao, SHI Zhilong, YANG Wenlong, WANG Yuanyuan (2137)
- Geochronology and geochemistry of volcanic rocks of Lower Cretaceous Meifeng Formation in Sunwu area, Lesser Khingan Mountains YUE Hongju, LU Sheng, YU Qingyang, ZHAI Yanchao, ZHANG Qing (2146)
- Characteristics of ore-bearing rock series, control conditions and generative development model of karst bauxite deposit in central Guizhou—southern Chongqing LIU Ping, HAN Zhonghua, NIE Kun (2173)
- Hydrocarbon generation and expulsion potential of E_k_2 source rocks in the southern slope of Dongying Sag, Bohai Bay Basin WANG Yuwei, LIU Huimin, JIAO Hongyan, WANG Xuejun, LU Zhiyong, ZHAO Haiyan, LIU Jinyou, CHEN Honghan (2186)
- Formation and distribution of laumontite in sedimentary sequences and their exploration significance—A case study on the Middle—Upper Triassic Yanchang Formation in Ordos Basin WANG Long, DENG Xiuqin, CHU Meijuan, ZHANG Zhongyi, REN Zhaocai, LIU Guanglin, ZHANG Wenjing, QI Yalin (2205)
- Hydrogeochemical characteristics and evolution of groundwater in southern Jiangsu GONG Yabing, GONG Xulong, XU Shugang, TANG Xin, SU Dong, WU Xiayi (2217)
- Effects of lithology and planting years on ecological stoichiometry characteristics of soil carbon, nitrogen and phosphorus in *Hylocereus undulatus* Britt land YI Fen, DENG Yan, HONG Tao, XIE Yunqiu, WU Song, KE Jing (2231)

Research Progress

- Quantitative morphological analysis and ontogeny of *Traumatocrinus hsui* YU Yinyin, HE Xiao, QIN Yanjiao, Shi Zhenhua, RAN Weiyu, Li Bingxia, LUO Yongming, YU Meiyi (2247)
- Quaternary activity of the Huaiyuan—Chihe fault on southern section of the Tan-Lu fault zone FANG Lianghao, LU Shuo, SHU Peng, PAN Haobo, QI Hao, WANG Yangfan, WANG Fan (2258)
- Geological and geophysical characteristics and deep prospecting prediction of Xin Zhuang iron deposit in Jinling area, Zibo, Shandong ZHANG Baotao, HU Zhaoguo, MEI Zhenhua, WANG Xiangwei, WEI Zhengyu, ZHENG Yanyan, ZHAO Xiaobo, CHEN Lei, HU Chuangye (2268)

| | |
|---|--------|
| Maximum transgressionpaleocoastline in the Holocene in northern Hainan Island; Discovery and implications | |
| ZHANG Lei, WANG Chaoqun, MAI Fahai, JIA Liyun, SUN Dongxia, ZHANG Yaoling, | (2276) |
| YANG Xiaoxiao, HAN Jian'en, HAN Shuai, Lü Tongyan, DU Jianjun, ZHAO Xitao, HU Daogong | |
| Effect of contact metamorphism on coal-based graphene quantum dots | |
| FAN Jiangtao, TANG Yuegang, SONG Xiaoxia, WANG Shaoqing, LI Ruiqing, DONG Min | (2288) |

Scientific Review

| | |
|---|--------|
| Lithology identification: Method, research status and intelligent development trend | |
| XU Zhenhao, MA Wen, LI Shucui, LIN Peng, LIANG Feng, XU Guanglu, LI Shan, HAN Tao, SHI Heng | (2304) |
| Research progress of fluid inclusions and its application in ore deposit | |
| LI Xiaodong, ZHANG Yan, HAN Runsheng, WANG Lei, WU Jianbiao, CHENG Gong | (2318) |

Theme Paper

| | |
|---|--------|
| Study on rock information extraction from remote sensing images in Saishiteng area, Qinghai province | |
| ... LIN Haixing, CHENG Sanyou, WANG Xi, CHEN Jing, GU Pingyang, ZHUANG Yujun, ZHAO Xinyi, MA Gang | (2334) |
| Application research of high-resolution remote sensing data in the delineation of gold metallogenic potential areas in Shuidao area of Jiaodong Peninsula | |
| ZOU Jian, TANG Wenglong, WANG Fenghua, HU Feng, BO Junwei, WANG Zhixin, LIU Zhi, WEI Xufeng, LI Yong | (2347) |
| Application of WorldView-3 remote sensing data to uranium exploration in Benbatu area, Bayingobi Basin | |
| TONG Qinlong, YE Fawang, QIN Mingkuan, YI Min, WU Weichao | (2363) |
| Application of multi-source remote sensing data in rock and mineral identification in Karamaili area, Xinjiang | |
| ZHANG Zhao, CHUAN Chuan, LI Yunpeng | (2380) |
| Alteration Information Extraction and ore-prospecting prediction using ASTER Remote Sensing Data in Saindak Deposit, Pakistan ... | |
| LIU Lei, PU Xiaonan, HONG Jun, ZHANG Huishan, YASIR Shaheen Khalil | (2394) |
| Inversion of ground temperature from remote sensing data and delineation of geothermal anomaly targets in Yangjiang Basin, Guangdong Province | |
| TANG Hai, ZHANG Dailei, ZHOU Wenna | (2404) |

Correspondence • Reference • News Report • Introduction to New Book

| | |
|---|-------------|
| <i>Geological Society of China</i> announces the second batch of geological culture villages (or towns) | (2073) |
| The 11th session of the <i>Huang Jiqing</i> (<i>Huang T. K.</i>) <i>Science and Technology Prize to Young Geological Workers</i> issued | (1673) |
| <i>Geological Society of China</i> Launched its first batch of the fellows | (2102) |
| <i>Geological Society of China</i> Launched its first batch of the honorary fellows | (2218) |
| <i>Geological Society of China</i> announced the Results of 2022 Innovation Base (First Batch) | (2232,2289) |
| The second batch of natural selenium-riched land identified by <i>Geological Society of China</i> | (2409) |
| Discovery and significance of microbial induced sedimentary structure (MISS) from the Qiaotou Formation in eastern Liaoning | |
| WU Zijie, ZHANG Deming, FAN Haibin, ZHANG Guoren, QIU Longwei, WANG Haipeng, | (2408) |
| ZHONG Mishan, GENG Shufeng, ZHENG Wei, GAO Fuliang, ZHAO Hanqing | |
| 新书介绍 1 | (2411) |
| 新书介绍 2 | (2411) |
| Contents of <i>Geological Review</i> , 2022, Vol. 68 | (2416) |
| Index of the First Writers of <i>Geological Review</i> , 2022, Vol. 68 | (2425) |

Excutive editors of this issue: LIU Zhiqiang, ZHANG Yuxu;
format design and type setting: LIU Zhiqiang, ZHANG Yuxu