

中国地质(双月刊)

(ZHONGGUO DIZHI)

2025年3月第52卷第2期(总第427期)

目次

特别关注

青海共和盆地温度场特征、干热岩成因及资源潜力

…………… 张林友, 李旭峰, 朱贵麟, 张盛生, 张超, 王璜, 冯庆达, 许文豪, 牛兆轩, 邓志辉(399)

青海共和盆地干热岩人工储层示踪试验研究

…………… 朱贵麟, 刘东林, 周殷竹, 边超, 曹月婷, 冯庆达, 张林友, 许文豪, 牛兆轩, 邓志辉(416)

青海共和盆地干热岩 GR2 井现今地应力特征及断层稳定性分析

…………… 陈东方, 杨跃辉, 牛兆轩, 王红伟, 金显鹏, 李振宇, 吴海东, 刘东林(425)

青海共和盆地恰卜恰深部花岗岩热储时频电磁法探测及干热岩体预测

…………… 程正璞, 魏强, 连晟, 张海江, 胡文广, 米晓利, 雷鸣, 李成, 于蕾(438)

花岗岩型干热岩储层裂缝刻画的三维地震属性分析技术研究

…………… 连晟, 程正璞, 吴俊军, 董金伟, 田蒲源(452)

综述论文

全球关键矿产稳定供应研究新趋势、新热点与未来展望

…………… 唐金荣, 张宇轩, 徐利, 牛亚卓, 任继刚, 于瑞(462)

非洲锂矿成矿特征与勘查开发现状 …… 王秋舒, 李文, 陈其慎, 陈秀法, 张艳飞, 李玉洁(482)

中国重晶石矿床分布特征、成因类型、资源应用现状及其展望

…………… 张怡婷, 钟怡江, 王春连, 李梦凡, 张述鹏(495)

InSAR 技术在滑坡识别与监测中的应用研究进展 …… 陶昶旭, 张永双, 任三绍(513)

氧同位素技术在土壤-植被-生态-环境研究中的应用进展与展望

…………… 叶桂琦, 季文兵, 杨忠芳, 余涛, 侯青叶, 钱鹏(527)

磷灰石研究进展及其在矿床学领域的应用

…………… 李姜, 马振波, 杨艳, 黄健瀚, 张荣臻, 韩江伟(574)

学术论文

黔西北地区上二叠统煤层气富集机理与有利区优选评价

…………… 李鸿磊, 郭志军, 易同生, 秦勇, 杨通保, 金军(597)

中上扬子地区南华系大塘坡组沉积期岩相古地理及对油气成藏的指示

…………… 宋腾, 林拓, 李飞, 李浩涵, 吴海, 段轶(613)

[期刊基本参数]CN11-1167/P*1953*b*A4*374*zh*P*¥ 50.00*2000*22*2025-03

本期责任编辑: 郭 慧 李亚萍 郭博然 技术编辑: 黄彩霞

准噶尔盆地侏罗纪车—莫古隆起的发育阶段及其对沉积体系的制约
..... 孔家豪,张关龙,许淑梅,王金铎,曾治平,王千军,任新成,
武向峰,舒鹏程,马慧磊,崔慧琪(631)

新疆吐哈盆地胜北洼陷中侏罗统超压发育与致密气成藏
..... 徐雯,饶松,王晓龙,肖七林,万泽鑫,鲍一遥,刘宇坤,
陶泽,余家朝,石湘,程甜,姜继连(650)

湘中坳陷石炭系天鹅坪组富有机质页岩的形成与页岩气富集机理
..... 陈孝红,石万忠,田巍,何红生,李海(665)

基于多源数据统计分析的页岩脆性定量评价方法——以鄂西地区牛蹄塘组页岩为例
..... 李娟,王胜建,田玉昆,周惠,刘策,薛宗安(680)

武陵山地区下志留统石牛栏组狭缝型碳酸盐岩气成因分析
..... 张婕,魏红霞,汪双清,沈斌,庞飞,李梦来,杨柳(691)

矿物表面 CO₂-CH₄ 竞争吸附特征与扩散过程研究——以延安气田山西组 2 段为例
..... 林进,汪心雯,王香增,何庆成,孟祥振,吕敏,王泉波,杨利超(704)

基于土地质量调查结果探讨雄安新区第四系沉积相元素组成特征与物质来源
..... 周亚龙,郭志娟,王乔林,刘飞,王成文,宋云涛(714)

不同地质环境中锂的分布特征及生态、环境与生物健康效应
..... 于扬,王登红,王伟,高娟琴,王成辉,于泓,刘善宝,阚磊,岑况,秦燕(727)

河北乐亭县祥云岛海域悬浮沉积物分布规律与近岸海流作用
..... 文明征,田立柱,张少同,杨朋,李勇,王福,王振豪(745)

短文 (发现与进展)

甘肃北山地区首次发现“白银厂式”海相火山岩型铜多金属矿床(17.49 万吨)
..... 王学银,杨永春,王刚刚,樊新祥,戴霜,张旭,宋小宏,王作刚(756)

甘肃北山地区红尖兵山一带新发现斑岩型铍矿(359 吨)
..... 刘胜江,徐磊,张为,赵建国,唐文轶(758)

甘肃北山新探获一处中型金矿床—703 东金矿(5.2 吨)
..... 任晓东,智超,陈生民,陈镇海,曹恒,鲁光荣,崔勇(760)

甘肃北山包来呼都格新发现大型萤石矿床(100 万吨)
..... 王刚刚,李玉鹏,杨永春,樊新祥,陈永耀(762)

滇西北普朗斑岩铜矿区新发现热液脉型金矿床(1.2 吨)
..... 张传昱,苏肖宇,罗建宏,余海军,朱悦彰,许重阳(764)

简讯与热点

文献计量视角下地质学研究态势分析——以近十年结题的国家自然科学基金面上项目为例
..... 陈杨,宋韦剑,王鑫,王晓丽(766)

中国地质调查局 2024 年度地质科技十大进展简介 (封二)

《中国地质》第四届编辑委员会 《中国地质》被收录的 40 家数据库 (封三)

《中国地质》(双月刊)栏目设置与稿约 (I)

GEOLOGY IN CHINA

(Bimonthly)

Mar. 2025 Vol. 52, No.2 (Serial No. 427)

Contents

In Focus

Geothermal geological characteristics, genetic model and resource potential of hot dry rocks in the Gonghe Basin, Qinghai *ZHANG Linyou, LI Xufeng, ZHU Guilin, ZHANG Shengsheng, ZHANG Chao, WANG Huang, FENG Qingda, XU Wenhao, NIU Zhaoxuan, DENG Zhihui*(399)

Tracer test study on artificial reservoirs in hot dry rock geothermal systems in the Gonghe Basin, Qinghai *ZHU Guilin, LIU Donglin, ZHOU Yinzhu, BIAN Chao, CAO Yueting, FENG Qingda, ZHANG Linyou, XU Wenhao, NIU Zhaoxuan, DENG Zhihui*(416)

In-situ stress characteristics and fault stability analysis of hot dry rock GR2 well in the Gonghe Basin, Qinghai *CHEN Dongfang, YANG Yuehui, NIU Zhaoxuan, WANG Hongwei, JIN Xianpeng, LI Zhenyu, WU Haidong, LIU Donglin*(425)

Deep-seated granite thermal reservoir exploration and hot dry rock potential assessment in the Qiabuqia Area, Gonghe Basin, Qinghai: A time-frequency electromagnetic method approach *CHENG Zhengpu, WEI Qiang, LIAN Sheng, ZHANG Haijiang, HU Wenguang, MI Xiaoli, LEI Ming, LI Shu, YU Lei*(438)

Research on three-dimensional seismic attribute fusion technology for characterizing fractures in granite geothermal reservoirs *LIAN Sheng, CHENG Zhengpu, WU Junjun, DONG Jinwei, TIAN Puyuan*(452)

Reviews

Stability of global critical mineral supplies: Trends, hot topics, and further outlook *TANG Jinrong, ZHANG Yuxuan, XU Li, NIU Yazhuo, REN Jigang, YU Rui*(462)

Metallogenic characteristics and exploration development status of lithium deposits in Africa *WANG Qiushu, LI Wen, CHEN Qishen, CHEN Xiufa, ZHANG Yanfei, LI Yujie*(482)

Distribution characteristics, genesis types, current status of resource application of barite deposits in China and its prospects *ZHANG Yiting, ZHONG Yijiang, WANG Chunlian, LI Mengfan, ZHANG Shupeng*(495)

Research progress of InSAR technology application on landslide identification and monitoring *TAO Changxu, ZHANG Yongshuang, REN Sanshao*(513)

Research progress and prospect of oxygen isotope technique in soil-vegetation-ecology-environment studies *YE Guiqi, JI Wenbing, YANG Zhongfang, YU Tao, HOU Qingye, QIAN Kun*(527)

Reviews on apatite and its application in the field of ore deposit geology *LI Jiang, MA Zhenbo, YANG Yan, HUANG Jianhan, ZHANG Rongzhen, HAN Jiangwei*(574)

Research Articles

Enrichment mechanism, optimization and evaluation of favorable CBM areas in the Upper Permian of Northwest Guizhou *LI Honglei, GUO Zhijun, YI Tongsheng, QIN Yong, YANG Tongbao, JIN Jun*(597)

Lithofacies paleogeography during the depositional period of the Nanhua System Datangpo Formation and its indications for hydrocarbon accumulation in the Middle and Upper Yangtze Region, South China *SONG Teng, LIN Tuo, LI Fei, LI Haohan, WU Hai, DUAN Ke*(613)

(Executive editors of this issue: GUO Hui, LI Yaping, GUO Boran)

- Development stage of Jurassic Che–Mo Paleouplift in the Junggar Basin and its constraints on sedimentary system *KONG Jiahao, ZHANG Guanlong, XU Shumei, WANG Jinduo, ZENG Zhiping, WANG Qianjun, REN Xincheng, WU Xiangfeng, SHU Pengcheng, MA Huilei, CUI Huiqi*(631)
- Characteristics of Middle Jurassic overpressure and tight gas accumulation in Shengbei Sub–sag, Turpan–Hami Basin, Xinjiang *XU Wen, RAO Song, WANG Xiaolong, XIAO Qilin, WAN Zexin, BAO Yiyao, LIU Yukun, TAO Ze, SHE Jiachao, SHI Xiang, CHENG Tian, JIANG Jilian*(650)
- Mechanism of organic–rich shale formation and shale gas enrichment in the Carboniferous Tian'eping Formation from the Xiangzhong Depression *CHEN Xiaohong, SHI Wanzhong, TIAN Wei, HE Hongsheng, LI Hai*(665)
- Quantitative evaluation of shale brittleness based on statistics: Taking shale of Niutitang Formation in Western Hubei as an example *LI Juan, WANG Shengjian, TIAN Yukun, ZHOU Hui, LIU Ce, XUE Zongan*(680)
- Genesis analysis of slit–type carbonate gas reservoir in the Lower Silurian Shiniulan Formation in Wulingshan area *ZHANG Jie, WEI Hongxia, WANG Shuangqing, SHEN Bin, PANG Fei, LI Menglai, YANG Liu*(691)
- Competitive adsorption characteristics and diffusion process of CO₂–CH₄ on mineral surface: A case study of the 2nd section of Shanxi Formation in Yan'an Gas Field
..... *LIN Jin, WANG Xinwen, WANG Xiangzeng, HE Qingcheng, MENG Xiangzhen, LÜ Min, WANG Quanbo, YANG Lichao*(704)
- Discussion on the element composition characteristics and material sources of Quaternary sedimentary facies based on the land quality survey results in Xiong'an New Area
..... *ZHOU Yalong, GUO Zhijuan, WANG Qiaolin, LIU Fei, WANG Chengwen, SONG Yuntao*(714)
- Distribution characteristics and ecological, environmental and biological health effects of lithium in different geological environments *YU Yang, WANG Denghong, WANG Wei, GAO Juanqin, WANG Chenghui, YU Feng, LIU Shanbao, KAN Lei, CEN Kuang, QIN Yan*(727)
- Distribution of suspended sediments and action of nearshore currents in Xiangyun Island, Laoting County, Hebei Province *WEN Mingzheng, TIAN Lizhu, ZHANG Shaotong, YANG Peng, LI Yong, WANG Fu, WANG Zhenhao*(745)

Short communication

- Discovery of Baiyinchang type's marine volcanic copper polymetallic deposit (174.9 kt) in the Beishan area, Gansu *WANG Xueyin, YANG Yongchun, WANG Ganggang, FAN Xinxiang, DAI Shuang, ZHANG Xu, SONG Xiaohong, WANG Zuogang*(756)
- Discovery of a new porphyry–type beryllium deposits (359 t) in Hongjianbing Mountain of Beishan area, Gansu *LIU Shengjiang, XU Lei, ZHANG Wei, ZHAO Jianguo, TANG Wenyi*(758)
- Discovery of a new medium–sized gold deposit in Beishan, Gansu Province: 703 East Gold Mine (5.2 t)
..... *REN Xiaodong, ZHI Chao, CHEN Shengmin, CHEN Zhenhai, CAO Heng, LU Guangrong, CUI Yong*(760)
- Discovery of a large fluorite deposit (1000 kt) in Baolaihuduge, Beishan orogenic belt, Gansu
..... *WANG Ganggang, LI Yupeng, YANG Yongchun, FAN Xinxiang, CHEN Yongyao*(762)
- Discovery of hydrothermal vein–type gold deposit (1.2 t) in Pulang porphyry copper deposit, northwestern Yunnan *ZHANG Chuanyu, SU Xiaoyu, LUO Jianhong, YU Haijun, ZHU Yuezhong, XU Chongyang*(764)

News and Highlights

- Research on the development trend of geology from the perspective of bibliometrics: A case study of NSFC General Program concluded in recent 10 years *CHEN Yang, SONG Weijian, WANG Xin, WANG Xiaoli*(766)