

# 地 球 科 学

2024 年 9 月 第 49 卷 第 9 期

## 目 次

### · 矿物学·岩石学·矿床学 ·

- 西藏措勤地区敌布错组时代重新厘定 ..... 刘 函, 李 俊, 高 睿, 苟正彬, 张士贞(3071)  
东天山星星峡-红柳井地区二叠纪 A型花岗质岩石成因及构造意义 ..... 贺昕宇, 方同辉, 杨自安, 杜海超, 刘海鹏, 王 京, 贾润幸, 郑文皓(3089)  
柴北缘西段绿梁山早古生代复式花岗岩体成因 ..... 张 懿, 朱小辉, 蒲永霞, 张 君, 任云飞, 王海杰, 孔红喜, 陈丹玲(3106)  
华北克拉通东缘新元古代早期基性岩床的时代及其地质意义:来自锆石学的证据 ..... 孙 逊, 刘超辉, 段瑞涵(3122)  
古特提斯演化的岩浆作用记录:来自桂东南印支期火山岩证据 ..... 覃 悅, 蔡永丰, 刘 军, 刘希军, 周 云, 李政林, 杨栎娅(3140)  
(U-Th)/He 定年及影响因素研究进展 ..... 杨 莉, 杨 静, 田 鹏, 施 炜, 李 肖(3155)  
松辽盆地铁法地区砂岩型铀矿关键控矿因素的时空耦合 ..... 彭 虎, 焦养泉, 荣 辉, 逢 磊, 吕东霖, 郭晓丹, 王庆双, 宇文晓依(3182)

### · 地球生物学 ·

- 广西运动在华南板块北缘的构造响应:来自生物地层学方面的证据 ..... 王 欣, 高晓峰, 查显锋(3199)  
华南埃迪卡拉纪晚期深水相氮循环过程重建 ..... 叶凯云, 赵 坤, 童 霞, 李松倬, 郎咸国(3212)  
桂东云开地区上奥陶统兰瓮组腕足动物群特征与对比 ..... 吴 琛, 牛志军, 何垚砚, 张雨晨, 曾庆銮, 柯 学, 胡 昆, 王志宏, 李出安(3228)  
神农架大九湖泥炭孔隙水中微生物的碳代谢特征 ..... 田 文, 王红梅, 向 兴, 王锐诚, 黄咸雨(3241)  
煤矿开采区地下水微生物群落结构与功能及其对环境的响应 ..... 郭 林, 毛佳玲, 何 凯, 陈秀云, 黄鑫平, 蒋沙沙, 马丽媛(3252)

### · 能源地质学 ·

- 准噶尔盆地东部双井子地区平地泉组陆相页岩天然裂缝发育模式 ..... 杜晓宇, 金之钧, 曾联波, 刘国平, 何文军, 杨 森, 梁新平, 陆国青(3264)  
鄂尔多斯盆地陇东地区长 7<sub>1</sub> 亚段源储结构与石油赋存关系研究 ..... 成 铭, 陈冬霞, 雷文智, 姚东升, 王福伟, 解广杰(3276)  
有机质生烃对纳米有机孔隙形成演化的影响 ..... 张 旭, 王琳霖, 蔡苏阳, 张吉振, 李 豫, 吴陈君, 赵 娅, 肖七林(3292)  
珠江口盆地开平凹陷核杂岩拆离结构及其动力学成因 ..... 彭光荣, 张丽丽, 许新明, 何金海, 姜大朋, 叶 青(3306)  
砂岩热储温度场对回灌参数的响应机理与规律 ..... 李嘉龙, 康凤新, 白 通, 张平平, 李振函, 赵 强(3318)

### · 工程地质学与灾害地质学 ·

- 高陡岩质斜坡复杂结构面分布规律及统计均质区划分 ..... 潘晓娟, 张 文, 孙 琦, 蓝 升, 董文川(3334)  
基于覆盖土层厚度识别的区域斜坡降雨入渗稳定性定量评价 ..... 邹 浩, 贾 琳, 郑路路, 李本兴, 蔡静森(3347)  
采用模糊聚类算法确定 2021 年玛多地震序列的断层结构 ..... 李佺洪, 万永革(3363)

### · 自然地理学 ·

- 鄂西大九湖泥炭全新世中期以来的炭屑形貌特征及古火灾意义 ..... 孙清泉, 林 晓, 黄咸雨, 陈 丹(3377)  
晚更新世北极楚克奇陆架边缘有机碳的差异埋藏 ..... 宋 赛, 叶黎明, 于晓果, 吴自银, 张永战, 章伟艳, 李中乔, 季仲强, 金海燕, 张泳聪, 杨 映(3387)  
塔里木河流域植被动态及潜在因素驱动机制 ..... 岳胜如, 王伦澈, 曹 苗, 孙 嘉(3399)

### · 其他 ·

- 华南板块东南部南华纪-震旦纪沉积地层区域对比、物源特征及构造演化 ..... 宋 芳, 何垚砚, 牛志军, 杨文强, 王志宏(3411)  
高砷地下水中氮循环对砷释放过程的影响 ..... 张振超, 梁 莹, 许 洁, 姜 雪, 马 瑞(3428)  
人工湿地去除抗生素抗性基因 ..... 柳林妹, 陈海洋, 朱冠华, 翟远征(3440)  
《地球科学》2024 年 10 月第 49 卷第 10 期要目预告 ..... (3376)

主编 王焰新 责任编辑 李 根

期刊基本参数: CN 42-1874/P \* 1957 \* m \* A4 \* 374 \* zh \* P \* ¥50.00 \* 1200 \* 26 \* 2024-09

封面照片: 青白口系赵圩组灰岩被新元古代早期辉长岩床侵入(刘超辉提供)

# EARTH SCIENCE

## Vol.49 No.9 Sept. 2024

### CONTENTS

#### • Mineralogy•Petrology•Mineral Deposits •

- The Age Re-Determination of the Dibucuo Formation in Cuoqin Area, Xizang ..... *Liu Han, Li Jun, Gao Rui, Gou Zhengbin, Zhang Shizhen* (3071)  
Petrogenesis and Tectonic Implications of A-Type Granitoids in the Xingxingxia-Hongliujing Area, Eastern Tianshan ..... *He Xinyu, Fang Tonghui, Yang Zi'an, Du Haichao, Liu Haipeng, Wang Jing, Jia Runxing, Zheng Wenhao* (3089)  
Petrogenesis of the Lüliangshan Early Paleozoic Composite Granite Pluton in North Qaidam Tectonic Belt ..... *Zhang Yi, Zhu Xiaohui, Pu Yongxian, Zhang Jun, Ren Yunfei, Wang Haijie, Kong Hongxi, Chen Danling* (3106)  
The Age and Geological Significance of Early Neoproterozoic Mafic Sills on the Eastern Margin of the North China Craton: Evidence from Zirconology ..... *Sun Xun, Liu Chaohui, Duan Ruihan* (3122)  
Magmatism Records of Palaeo-Tethyan Evolution: Evidence from Indosian Volcanic Rocks in Southeastern Guangxi ..... *Qin Yue, Cai Yongfeng, Liu Jun, Liu Xijun, Zhou Yun, Li Zhenglin, Yang Liya* (3140)  
The Research Advances of (U-Th)/He Dating and Influencing Factors ..... *Yang Li, Yang Jing, Tian Peng, Shi Wei, Li Xiao* (3155)  
Spatial-Temporal Coupling of Key Ore-Controlling Factors for Sandstone-Type Uranium Deposits in Tiefa Area, Songliao Basin ..... *Peng Hu, Jiao Yangquan, Rong Hui, Pang Bo, Donglin, Guo Xiaodan, Wang Qingshuang, Yuwen Xiaoyi* (3182)

#### • Geobiology •

- Tectonic Response of the Kwangtung Orogeny in the Northern Margin of the South China Block: Evidences from Biostratigraphy ..... *Wang Xin, Gao Xiaofeng, Zha Xianfeng* (3199)  
Reconstruction of Deep-Water Nitrogen Cycle during the Late Ediacaran in South China ..... *Ye Kaiyun, Zhao Kun, Tong Xia, Li Songzhuo, Lang Xianguo* (3212)  
Characteristics and Comparison of the Brachiopod Fauna of the Upper Ordovician Lanweng Formation in Yunkai Area, Eastern Guangxi ..... *Wu Chen, Niu Zhijun, He Yaoyan, Zhang Yuchen, Zeng Qingluan, Ke Xue, Hu Kun, Wang Zihong, Li Chu'an* (3228)  
Characteristics of Microbial Carbon Utilization in Peat Pore Water in the Dajihu Peatland, Shennongjia ..... *Tian Wen, Wang Hongmei, Xiang Xing, Wang Ruicheng, Huang Xianyu* (3241)  
Microbial Community Structure and Function in Groundwater of Abandoned Coal Mine and Its Response to Environment ..... *Guo Lin, Mao Jialing, He Kai, Chen Xiuyun, Huang Xinpeng, Jiang Shasha, Ma Liyuan* (3252)

#### • Energy Geology •

- Development Model of Natural Fractures in Continental Shale of the Pingdiquan Formation in the Shuangjingzi Area, Eastern Junggar Basin ..... *Du Xiaoyu, Jin Zhijun, Zeng Lianbo, Liu Guoping, He Wenjun, Yang Sen, Liang Xinpeng, Lu Guoqing* (3264)  
The Difference of Source Rocks in Source-Reservoir Structure of Tight Sandstones of Chang 7, Submember and Its Influence on Hydrocarbon Enrichment, Longdong Area, Ordos Basin ..... *Cheng Ming, Chen Dongxia, Lei Wenzhi, Yao Dongsheng, Wang Fuwei, Guanjie* (3276)  
Effects of Hydrocarbon Generation on the Occurrence of Organic Nanopores during Thermal Maturity of Organic Matters ..... *Zhang Xu, Wang Linlin, Cai Suyang, Zhang Jizhen, Li Yu, Wu Chenjun, Zhao Ya, Xiao Qilin* (3292)  
Core Complex and Detachment Structure in the Kaiping Sag, Pearl River Mouth Basin and a Discussion on the Dynamics ..... *Peng Guangrong, Zhang Lili, Xu Ximeng, He Jinhai, Jiang Dapeng, Ye Qing* (3306)  
Response Process and Mechanism of Sandstone Geothermal Reservoir Temperature to Reinjection Parameters ..... *Li Jialong, Kang Fengxin, Bai Tong, Zhang Pingping, Li Zhenhan, Zhao Qiang* (3318)

#### • Engineering Geology and Disaster Geology •

- Complex Structural Plane Distribution of High-Steep Rock Slope and Division of Statistical Homogeneous Zones ..... *Pan Xiaojuan, Zhang Wen, Sun Qi, Lan Sheng, Dong Wenchuan* (3334)  
Regional Hillslope Stability Analysis under Rainfall Based on Characterization of Overburden Soil Layer Thickness ..... *Zou Hao, Jia Lin, Zheng Lulu, Li Benxing, Cai Jingsen* (3347)  
Geometry of Seismogenic Faults Determination of the 2021 Maduo Earthquake Sequence by Fuzzy Clustering Algorithm ..... *Li Quanhong, Wan Yongge* (3363)

#### • Physical Geography •

- Charcoal Morphotypes and Potential Paleofire Significance in Middle-Late Holocene in the Dajihu Peatland, Hubei Province, Central China ..... *Sun Qingquan, Lin Xiao, Huang Xianyu, Chen Dan* (3377)  
Differential Burial of Particulate Organic Carbon at the Chukchi Continental Margin, Arctic Ocean since Late-Pleistocene ..... *Song Sai, Ye Liming, Yu Xiaoguo, Wu Ziyin, Zhang Yongzhan, Zhang Weiyuan, Li Zhongqiao, Ji Zhongqiang, Jin Haiyan, Zhang Yongcong, Yang Ying* (3387)  
Vegetation Dynamics and Potential Factors Driving Mechanisms in the Tarim River Basin ..... *Yue Shengru, Wang Lunche, Cao Qian, Sun Jia* (3399)

#### • Others •

- Nanhuan-Sinian Sedimentary Strata Correlation and Its Provenance Feature in Southeastern Part of South China Block: Implications for Tectonic Evolution ..... *Song Fang, He Yaoyan, Niu Zhijun, Yang Wenqiang, Wang Zihong* (3411)  
Effect of Nitrogen Cycling on Arsenic Release in Groundwater with High Arsenic Content ..... *Zhang Zhenchao, Liang Ying, Xu Jie, Jiang Xue, Ma Rui* (3428)  
Constructed Wetlands for the Removal of Antibiotic Resistance Genes ..... *Liu Linmei, Chen Haiyang, Zhu Guanhua, Zhai Yuanzheng* (3440)