

地 球 科 学

2025 年 12 月 第 50 卷 第 12 期(卷终)

目 次

• 能源地质学 •

- 奥陶纪—志留纪转折期火山活动与异常高有机质沉积:以中国华南地区为例
..... 孔维亮,邱 振,张家强,张 琴,刘 雯,曲天泉,高万里,蔡光银,江 冲(4583)
- 珠江口盆地恩平 17 洼深层烃源岩特征及有效烃源灶分布预测
..... 石 创,彭光荣,龙祖烈,李振升,郑立庆,曹雨茜,熊万林(4604)
- 渤海超深层中生界火山岩储层发育特征及油气成藏主控因素:以渤中 A 构造为例
..... 郭 涛,张江涛,郝轶伟,王晨杰,王 蔚,滑彦岐(4617)
- 巴西桑托斯盆地地下白垩统湖相碳酸盐岩沉积差异及其主控因素..... 程 涛,陶维祥,李 丹,刘昕羽,张 成(4635)
- 苏北盆地溱潼凹陷全油气系统油源对比
..... 薛 冈,陈红汉,马晓东,臧素华,咎 灵,白鸾羲,邵 浩,苏 鹏,程 吉,苏丹梅,黄天娇,江嘉怡(4652)
- 基于矿物组分微观润湿特性的页岩油可动性研究
..... 贾 鈞,邓 森,鲜成钢,左 玄,杨景辉,高之业,钟世博,张党政,吴 楠(4671)
- 天山北麓中生代构造特征及其对新生代变形的意义 冀冬生,甘仁忠,庞志超,李 静,王心强,李全皓(4685)
- 羌塘盆地毕洛错含油页岩地层构造变形特征及时代新认识..... 赵 珍,张莉莉,王 茜,杨易卓,田 涛(4697)
- 湖相碳酸盐岩天文旋回识别及优质储层发育特征和预测:以西部凹陷雷家地区沙四段为例
..... 户昶昊,席振铎,陈 昌,李 阳(4715)
- 塔里木盆地顺北地区干酪根碳同位素恢复及下寒武统玉尔吐斯组烃源岩生烃模式探讨
..... 曹自成,云 露,平宏伟,陈红汉,耿 锋,韩 俊,吕海涛,蒋华山,刘永立(4736)
- 页岩超长段压裂模式效果评价及套变弱化机制..... 郝越翔,尹 陈,李宜真,江雨濛,曾 超,赵学钦,刘 陈(4751)
- 碳酸盐岩断裂分类分级预测:以塔里木盆地塔河油田为例..... 王 震,饶 莹,谢海洋,史冠中(4764)
- 东海含油气盆地基础地质问题研究进展及展望 朱伟林,张迎朝,蒋一鸣,李 宁,赵世杰,唐贤君,何新建,付晓伟(4783)
- 中非剪切背景下裂陷盆地的发育机制:以 Bongor 盆地为例 ... 肖坤叶,张新顺,高彦杰,王 林,杜业波,王 利,高华华(4801)
- 矿物学·岩石学·矿床学 •
- 花岗岩晶岩与花岗岩的关系 赵振华,马 林(4819)
- 环境科学 •
- 人工溶采作用下非均质盐湖卤层渗透系数动态演化机制..... 汪子涛,李建森,余冬梅(4879)
- 地表水长期回灌对温汤断裂热储的影响 樊柄宏,白细民,叶海龙,周国彬,李严严,曾梓琪,陈 进,王 正(4894)
- 基于多尺度特征增强的黑土有机质含量高光谱卫星遥感反演..... 陈伟涛,徐佳辉,王 锐,王瑞祺,杨汉水(4909)
- 热融滑塌形态特征、演化过程和稳定性模拟综述 郝君明,钟积身,贾佩钱,吴通华,陈 杰(4919)
- 蓝细菌与蒙脱石对低温原白云石形成的协同促进效应 陈 婷,戴兆毅,邱 轩,常 标,王红梅,刘 邓(4938)
- 工程地质学和灾害地质学 •
- 瑞士瓦莱州 Blatten 高位远程崩滑碎屑流成灾特征与级联放大效应
..... 李 滨,高 杨,庄 宇,刘晓杰,张 晗,秦林鹏,郭 桢,殷跃平(4950)
- 底床失稳形成泥石流的启动临界条件实验 余 斌,彭秋建,陈 龙,杨治义(4970)
- 基于深度积分法和不确定性分析的固废堆填土边坡失稳致灾风险定量评价:以深圳“12·20”光明滑坡为例
..... 罗紫琪,刘磊磊,曾志雄,王 涛,李建国,桑琴扬(4984)
- 地铁深基坑近接高铁降水耦合影响与协同控制 王晓睿,李汶蔚,张 坤,张华青(5000)
- 其他 •
- 中上扬子海相深层页岩气赋存和富集的关键因素是什么? ... 杨 锐,何治亮,董 田,侯宇光,郭小文,韩元佳,王芙蓉(5012)
- 北武夷冷水坑矿田下鲍银铅锌矿床深部找矿取得重大突破
..... 欧阳永棚,陈国华,曾祥辉,饶建锋,魏 锦,张如斌,唐 炜,田晓涛,邓友国,周天禹,曾闰灵,陈 祺(5020)
- 陕西省凤县高植被覆盖区高光谱遥感找矿新发现及其勘查意义
..... 宋建国,张振凯,刘 磊,张文龙,吝路军,张铎蕾,吕晓叶(5026)
- 我国地下水污染防治战略的演进与实践 翟远征,朱冠华,严雨婷,童宝才,刘 宇,左 锐(5032)
- 《地球科学》2026 年 1 月第 51 卷第 1 期要目预告 (5011)
- 《地球科学》2025 年第 50 卷总目录 (5035)

主编 王焰新

责任编辑 姚 戈

期刊基本参数: CN 42—1874/P * 1957 * m * A4 * 452 * zh * P * ¥ 50.00 * 1200 * 28 * 2025—12

封面 照 片: 气候变化驱动瑞士 Blatten 冰岩崩高位启动与级联放大—远程致灾(中国地质科学院地质力学研究所高杨提供)

EARTH SCIENCE

Vol.50 No.12 Dec. 2025

CONTENTS

•Energy Geology•

- Volcanic Activity and Extraordinarily High Organic Matter Deposition across Ordovician-Silurian Transition: A Case Study from South China
..... Kong Weiliang, Qiu Zhen, Zhang Jiaqiang, Zhang Qin, Liu Wen, Qu Tianquan, Gao Wanli, Cai Guangyin, Jiang Chong (4583)
- Characteristics of Deep Hydrocarbon Source Rocks and Prediction of Effective Source Kitchen Distribution in Enping 17 Sub-Sag,
Pearl River Mouth Basin Shi Chuang, Peng Guangrong, Long Zulie, Li Zhensheng, Zheng Liqing, Cao Yuhan, Xiong Wanlin (4604)
- Development Characteristics and Main Controlling Factors of Oil and Gas Reservoirs in Ultra Deep Mesozoic Volcanic Reservoirs in Bohai
Sea: Taking Bozhong A Structure as an Example Guo Tao, Zhang Jiangtao, Hao Yiwei, Wang Chenjie, Wang Wei, Hua Yanqi (4617)
- Depositional Differences and Main Controlling Factors of Lacustrine Carbonate Sediments in Lower Cretaceous of Santos Basin, Brazil
..... Cheng Tao, Tao Weixiang, Li Dan, Liu Xinyu, Zhang Cheng (4635)
- Oil Correlation for Whole Petroleum System in Quintong Sag, Subei Basin
..... Xue Gang, Chen Honghan, Ma Xiaodong, Zang Suhua, Zan Ling, Bai Luanxi, Tai Hao, Su Peng, Cheng Ji, Su Danmei, Huang Tianjiao, Jiang Jiayi (4652)
- Shale Oil Mobility Based on Microscopic Wetting Properties of Mineral Components
..... Jia Bao, Deng Sen, Xian Chenggang, Zuo Xuan, Yang Jinghui, Gao Zhiye, Zhong Shibo, Zhang Dangzheng, Wu Nan (4671)
- Mesozoic Structure and Its Impact on Cenozoic Deformation in Northern Piedmont of Tianshan Mountain
..... Ji Dongsheng, Gan Renzhong, Pang Zhichao, Li Jing, Wang Xinqiang, Li Quanhao (4685)
- Tectonic Deformation and New Viewpoint on Age of the Biluoco Oil Shale Stratum in Qiangtang Basin
..... Zhao Zhen, Zhang Lili, Wang Qian, Yang Yizhuo, Tian Tao (4697)
- Identification of Astronomical Cycles and Prediction of High-Quality Reservoir Development in Lacustrine Carbonates: A Case Study of the
Fourth Member of Shahejie Formation in Leijia Area, Western Sag Hu Changhao, Xi Zhenzhu, Chen Chang, Li Yang (4715)
- Reconstruction of Carbon Isotope of Kerogen in Shunbei Area, Tarim Basin and Discussions on Hydrocarbon Generation Model of Lower
Cambrian Yurtus Formation Source Rock Cao Zicheng, Yun Lu, Ping Hongwei, Chen Honghan, Geng Feng, Han Jun, Huang Cheng, Lyu Haitao, Jiang Huashan, Liu Yongli (4736)
- Evaluation of Fracturing Effect and Mechanism of Casing Deformation Weakening for Ultra-Long Section Fracturing
..... Hao Yuexiang, Yin Chen, Li Yizhen, Jiang Yumeng, Zeng Chao, Zhao Xueqin, Liu Chen (4751)
- Fracture Classification-Grading Prediction Technology and Application in Carbonate Reservoir Rocks: A Case Study from Tahe Oilfield,
Tarim Basin Wang Zhen, Rao Ying, Xie Haiyang, Shi Guanzhong (4764)
- Research Advances and Prospects on Fundamental Geological Issues of the East China Sea Petroliferous Basin
..... Zhu Weilin, Zhang Yingzhao, Jiang Yiming, Li Ning, Zhao Shijie, Tang Xianjun, He Xinjian, Fu Xiaowei (4783)
- Formation Mechanism of Rift Basins in Central African Strike-Slip Tectonic Setting: A Case Study of Bongor Basin
..... Xiao Kunye, Zhang Xinshun, Gao Yanjie, Wang Lin, Du Yebo, Wang Li, Gao Huahua (4801)

•Mineralogy•Petrology•Mineral Deposits •

- Relationship between Granitic Pegmatite and Granite Zhao Zhenhua, Ma Lin (4819)

•Environmental Sciences •

- Dynamic Evolution Mechanism of Hydraulic Conductivity in Heterogeneous Salt Lake Brine Aquifers during Artificial Solution Mining
..... Wang Zitao, Li Jiansen, Yu Dongmei (4879)
- Influence of Long-Term Surface Water Reinjection on Thermal Reservoir of Wentang Fault
..... Fan Binghong, Bai Ximin, Ye Hailong, Zhou Guobin, Li Yanyan, Zeng Ziqi, Chen Jin, Wang Zheng (4894)
- Hyperspectral Remote Sensing Inversion of Black Soil Organic Matter Content Based on Multi-Scale Feature Enhancement
..... Chen Weitao, Xu Jiahui, Wang Rui, Wang Ruizhen, Yang Hanshui (4909)
- A Review of Retrogressive Thaw Slumps Characteristics, Evolution, and Permafrost Stability Analysis Methods
..... Hao Junming, Zhong Jishen, Jia Peiqian, Wu Tonghua, Chen Jie (4919)
- Synergistic Effects of Cyanobacteria and Montmorillonite on Formation of Low-Temperature Protodolomite
..... Chen Ting, Dai Zhaoyi, Qiu Xuan, Chang Biao, Wang Hongmei, Liu Deng (4938)

•Engineering Geology and Disaster Geology •

- Characteristics and Cascading Effects of the Blatten Avalanche in the Swiss Alps
..... Li Bin, Gao Yang, Zhuang Yu, Liu Xiaojie, Zhang Han, Qin Linpeng, Guo Zhen, Yin Yueping (4950)
- Experimental Study on Critical Condition of Initiation of Debris Flow in Channel by Bed Failure Model Yu Bin, Peng Qiujian, Chen Long, Yang Zhiyi (4970)
- Quantitative Risk Assessment of Solid Waste Landfill Slope Instability-Induced Disasters Based on Depth-Integrated Method and
Uncertainty Analysis: A Case Study of Shenzhen's "12•20" Guangming Landslide Luo Ziqi, Liu Leilei, Zeng Zhixiong, Wang Tao, Li Jianguo, Sang Qinyang (4984)
- Research on Coupling Effects and Collaborative Control of Dewatering in Metro Deep Foundation Pits Adjacent to High-Speed Railways
..... Wang Xiaorui, Li Wenwei, Zhang Kun, Zhang Huaqing (5000)
- *****

What are the Key Factors Controlling the Occurrence and Enrichment of Deep Marine Shale Gas in the Middle-Upper Yangtze Region?

- Yang Rui, He Zhiliang, Dong Tian, Hou Yuguang, Guo Xiaowen, Han Yuanjia, Wang Furong (5012)
- Major Breakthrough Achieved in Deep Ore Prospecting of the Xiabao Silver - Lead - Zinc (Ag-Pb-Zn) Deposit in the Lengshuikeng Orefield, North Wuyi
Metallogenic Belt Ouyang Yongpeng, Chen Guohua, Zeng Xianghui, Rao Jianfeng, Wei Jin, Zhang Rubin, Tang Wei, Tian Xiaotao, Deng Youguo, Zhou Tianyu, Zeng Runli, Chen Qi (5020)

- New Discoveries and Exploration Significance of Hyperspectral Remote Sensing Prospecting in Highly Vegetated Area of Fengxian County, Shaanxi Province
..... Song Jianguo, Zhang Zhenkai, Liu Lei, Zhang Wenlong, Lin Lujun, Zhang Xinlei, Lü Xiaoye (5026)

- The Evolution and Practice of Strategies for Groundwater Pollution Prevention and Governance in China
..... Zhai Yuanzheng, Zhu Guanhua, Yan Yuting, Tong Baocai, Liu Yu, Zuo Rui (5032)

Editor in Chief Wang Yanxin
Executive Editor Yao Ge