

地 球 科 学

2021 年 10 月 第 46 卷 第 10 期

目 次

· 石油、天然气地质学 ·

- 湘东南中泥盆统石英砂砾岩物源分析及其大地构造意义 陈家驹,徐先兵,梁承华,徐亚东(3421)
微观非均质性对砂砾岩储层致密化的影响机理:以准噶尔盆地东道海子凹陷 DN8 井区上二叠统梧桐沟组为例
..... 曹江骏,罗静兰,马迪娜·马吾提汗,盛伟琰,毛倩茹,杨 涛,邱文渊,宋昆鹏(3435)
松辽盆地钱家店铀矿床层间氧化带结构定量表征及制约因素
..... 曹民强,荣 辉,陈振岩,焦养泉,里宏亮,王 岩,李青春(3453)
南海南部巽他陆架氧同位素 3 期粘土矿物记录及其古环境意义 王红星,刘志飞,吴家望,赵玉龙,Karl Stattegger(3467)
南黄海盆地中部隆起构造特征及其成因机制 张 田,朱伟林,胡森清,陈春峰,高顺莉,陈忠云,付晓伟,钟 锴(3481)
扬子北缘南华纪裂谷系统:基于重力异常及沉积学证据
..... 李路顺,汪泽成,肖安成,杨高印,姜 华,苏 楠,吴 磊,师平平,王依平(3496)
基于扩展有限元法的碳酸盐岩地热储层岩体裂缝扩展行为 王 伟,付 豪,邢林啸,柴 波,刘 波,施星宇(3509)
川中地区龙王庙组高频层序与沉积微相及其对有利储层的控制 高 达,胡明毅,李安鹏,杨 威,谢武仁,孙春燕(3520)
运用方解石中流体包裹体最小均一温度确定塔河油田奥陶系油气成藏时间:来自激光原位方解石 U-Pb 年龄的证据
..... 徐 豪,郭小文,曹自成,王 斌,刘永立,陈家旭,张旭友,罗 涛(3535)
东海盆地丽水凹陷 CO₂ 分布特征及成藏主控因素 牛 杏,何云龙,庄新国(3549)
鄂尔多斯盆地陇东地区长 9 油层组砂体成因与油气差异分布
..... 李程善,张文选,雷 宇,张海峰,黄 易,张自力,孙明亮(3560)
东海盆地椒江凹陷古新统烃源岩地球化学特征及生烃历史 雷 闯,殷世艳,叶加仁,吴景富(3575)
准噶尔盆地阜康凹陷侏罗系超压成因、垂向传导及油气成藏
..... 宫亚军,张奎华,曾治平,秦 峰,牛靖靖,范 婕,刘 慧(3588)
鄂尔多斯盆地中部地区马家沟组断裂控制天然气运移方向的流体包裹体证据
..... 冯艳伟,陈 勇,赵振宇,刘听雨,雷 静,钟 升,王 森,李冠华,裴仰文(3601)
湘西沅麻盆地印支期以来古流体特征及其对寒武系页岩气勘探方向的指示
..... 刘 安,蔡全升,陈孝红,李 海,苗凤彬,彭中勤(3615)
冀中拗陷束鹿凹陷潜山原油地球化学特征与油源对比
..... 王元杰,蔡 川,肖 阳,明 锦,田 然,任 艺,朱张丽,张钰景,时 聪(3629)
渤中 19-6 潜山构造带凝析油中轻烃地球化学特征及意义 刘梦醒,郝 芳,王 奇,牛成民,田金强(3645)
川中地区下侏罗统自流井组大二亚段陆相页岩层系岩性组合类型及其特征
..... 雷文智,陈冬霞,张 芮,刘子驿,张少敏(3657)
珠江口盆地阳江凹陷中新统潮控体系及其岩性圈闭勘探意义 吴 静,张晓钊,白海军,郑小波,蔡国富,李志垚(3673)
珠江口盆地珠一坳陷古近系“源—汇”系统分类及石油地质意义
..... 杜家元,张向涛,刘 培,罗 明,张 琴,姚佳利,王绪诚,梁 杰(3690)
琼东南盆地华光凹陷大型海底重力滑动系统特征及其成因机制
..... 李 林,张 成,闫 春,杨涛涛,解习农,王少凯,储生明(3707)

· 地球物理学和遥感地质学 ·

- 福建东洋地区地球物理场特征 张振宇,胡祥云,王大勇,陈 亮,王 刚,李永博(3717)
基于各类特征对齐迁移网络的多时相遥感图像分类 郭 艳,宋佳珍,马 丽,杨 敏(3730)
基于多尺度循环注意力网络的遥感影像场景分类方法 马欣悦,王梨名,祁昆仑,郑贵洲(3740)
基于边缘提取算法的岩层三角面产状半自动提取 林 楠,徐遥辰,高博文,翁旭华,陈宁华(3753)

· 环境地质学和工程地质学 ·

- 地质环境安全评价 孟 晖,张若琳,石菊松,李春燕(3764)
不同环境因子联接和预测模型的滑坡易发性建模不确定性 李文彬,范宣梅,黄发明,武雪玲,殷坤龙,常志璐(3777)
嘉峪关断裂古地震活动特征及其强震危险性影响 刘兴旺,吴 赵,梁明剑,何文贵(3796)

· 其他 ·

- 《地球科学》2021 年 11 月第 46 卷第 11 期要目预告 (3600)
美丽中国 宜居地球——中国地质大学(武汉)关于征集 70 个地球科学领域科学问题的通知 (3656)

主编 赖旭龙

责任编辑 谢晓红

期刊基本参数: CN 42—1874/P * 1957 * m * A4 * 386 * zh * P * ¥ 50.00 * 1200 * 28 * 2021—10

封面照片: 神农架后山坪地区南沱组典型的冰碛砾岩(李路顺提供)

EARTH SCIENCE

Vol.46 No.10 Oct. 2021

CONTENTS

•Petroleum, Natural Gas Geology•

- Provenance Analysis and Tectonic Implications of Middle Devonian Quartzose Conglomerate and Sandstone in Southeastern Hunan Province, South China *Chen Jiaju, Xu Xianbing, Liang Chenghua, Xu Yadong* (3421)
- Influence Mechanism of Micro-Heterogeneity on Conglomerate Reservoir Densification: A Case Study of Upper Permian Wutonggou Formation in DN8 Area of Dongdaohaizi Sag, Junggar Basin *Cao Jiangjun, Luo Jinglan, Madina Mawutihan, Sheng Weiyan, Mao Qianru, Yang Tao, Di Wenyuan, Song Kunpeng* (3435)
- Quantitative Characterization and Controlling Factors of the Interlayer Oxidation Zone of Qianjiadian Uranium Deposit, Songliao Basin *Cao Mingqiang, Rong Hui, Chen Zhenyan, Jiao Yangquan, Li Hongliang, Wang Yan, Li Qingchun* (3453)
- Clay Mineralogical Record and Its Paleoenvironmental Significance during Marine Isotope Stage 3 on the Sunda Shelf, Southern South China Sea *Wang Hongxing, Liu Zhifei, Wu Jiawang, Zhao Yulong, Karl Stattegger* (3467)
- Structural Characteristic and Its Genetic Mechanism of Central Uplift in South Yellow Sea Basin *Zhang Tian, Zhu Weilin, Hu Senqing, Chen Chunfeng, Gao Shunli, Chen Zhongyun, Fu Xiaowei, Zhong Kai* (3481)
- Rift System in Northern Yangtze Block during Nanhua Period: Implications from Gravity Anomaly and Sedimentology *Li Lushun, Wang Zecheng, Xiao Ancheng, Yang Gaoyin, Jiang Hua, Su Nan, Wu Lei, Shi Pingping, Wang Yiping* (3496)
- Crack Propagation Behavior of Carbonate Geothermal Reservoir Rock Mass Based on Extended Finite Element Method *Wang Wei, Fu Hao, Xing Linxiao, Chai Bo, Liu Bo, Shi Xingyu* (3509)
- High-Frequency Sequence and Microfacies and Their Impacts on Favorable Reservoir of Longwangmiao Formation in Central Sichuan Basin *Gao Da, Hu Mingyi, Li Anpeng, Yang Wei, Xie Wuren, Sun Chunyan* (3520)
- Application of Minimum Homogenization Temperatures of Aqueous Inclusions in Calcite Veins to Determine Time of Hydrocarbon Accumulation in Ordovician of Tahe Oilfield: Evidence from In-Situ Calcite U-Pb Dating by Laser Ablation *Xu Hao, Guo Xiaowen, Cao Zicheng, Wang Bin, Liu Yongli, Chen Jiaxu, Zhang Xuyou, Luo Tao* (3535)
- Distribution and Major Controlling Factors of CO₂ Reservoirs in Lishui Sag, East China Sea Basin *Niu Xing, He Yunlong, Zhuang Xinguo* (3549)
- Characteristics and Controlling Factors of Oil Accumulation in Chang 9 Member in Longdong Area, Ordos Basin *Li Chengshan, Zhang Wenxuan, Lei Yu, Zhang Haifeng, Huang Yi, Zhang Zili, Sun Mingliang* (3560)
- Geochemical Characteristics and Hydrocarbon Generation History of Paleocene Source Rocks in Jiaojiang Sag, East China Sea Basin *Lei Chuang, Yin Shiyao, Ye Jiaren, Wu Jingfu* (3575)
- Origin of Overpressure, Vertical Transfer and Hydrocarbon Accumulation of Jurassic in Fukang Sag, Junggar Basin *Gong Yajun, Zhang Kuihua, Zeng Zhiping, Qin Feng, Niu Jingjing, Fan Jie, Liu Hui* (3588)
- Migration of Natural Gas Controlled by Faults of Majiagou Formation in Central Ordos Basin: Evidence from Fluid Inclusions *Feng Yanwei, Chen Yong, Zhao Zhenyu, Liu Tingyu, Lei Jing, Zhong Sheng, Wang Miao, Li Guanhua, Pei Yangwen* (3601)
- Paleofluid Characteristics since Indosinian Movement in Yuanma Basin, West Hunan: Significance for Cambrian Shale Gas Exploration *Liu An, Cai Quansheng, Chen Xiaohong, Li Hai, Miao Fengbin, Peng Zhongqin* (3615)
- Geochemical Characteristics and Oil-Source Correlation of Crude Oils of Buried Hills in Shulu Sag, Jizhong Depression *Wang Yuanjie, Cai Chuan, Xiao Yang, Ming Jin, Tian Ran, Ren Yi, Zhu Zhangli, Zhang Yujing, Shi Cong* (3629)
- Light Hydrocarbon Geochemical Characteristics and Geological Significance of Buried Hill Condensate Oil in Bozhong 19-6 Structural Belt *Liu Mengxing, Hao Fang, Wang Qi, Niu Chengmin, Tian Jinqiang* (3645)
- Lithological Combination Types and Characteristics of Continental Shale Strata in the Second Sub-Member of Da'anzhai in Central Sichuan *Lei Wenzhi, Chen Dongxia, Zhang Rui, Liu Ziyi, Zhang Shaomin* (3657)
- Miocene Tidal Control System and Its Exploration Significance of Lithologic Trap in Yangjiang Sag, Pearl River Mouth Basin *Wu Jing, Zhang Xiaozhao, Bai Haijun, Zheng Xiaobo, Cai Guofu, Li Zhiyao* (3673)
- Classification of Paleogene Source-to-Sink System and Its Petroleum Geological Significance in Zhuyi Depression of Pearl River Mouth Basin *Du Jiaquan, Zhang Xiangtao, Liu Pei, Luo Ming, Zhang Qin, Yao Jiali, Wang Xucheng, Liang Jie* (3690)
- Characteristics and Genetic Mechanism of a Large-Scale Submarine Gravity-Driven System in Huaguang Depression, Qiongdongnan Basin *Li Lin, Zhang Cheng, Yan Chun, Yang Taotao, Xie Xi'ong, Wang Shaokai, Chu Shengming* (3707)

•Geophysics and Remote Sensing Geology•

- Geophysical Field Characteristics of Dongyang Region, Fujian Province *Zhang Zhenyu, Hu Xiangyun, Wang Dayong, Chen Liang, Wang Gang, Li Yongbo* (3717)
- Class-Wise Feature Alignment Based Transfer Network for Multi-Temporal Remote Sensing Image Classification *Guo Yan, Song Jiazhen, Ma Li, Yang Min* (3730)
- Remote Sensing Image Scene Classification Method Based on Multi-Scale Cyclic Attention Network *Ma Xinyue, Wang Liming, Qi Kunlun, Zheng Guizhou* (3740)
- Semi-Automatic Extraction of Triangular Facet Attitude Based on Edge Extraction Algorithm *Lin Nan, Xu Yaochen, Gao Bowen, Weng Xuhua, Chen Ninghua* (3753)

•Environmental Geology and Engineering Geology•

- Geological Environment Safety Evaluation *Meng Hui, Zhang Ruolin, Shi Jusong, Li Chunyan* (3764)
- Uncertainties of Landslide Susceptibility Modeling under Different Environmental Factor Connections and Prediction Models *Li Wenbin, Fan Xuanmei, Huang Faming, Wu Xueling, Yin Kunlong, Chang Zhilu* (3777)
- Paleoearthquake Characteristics of Jiayuguan Fault and Its Seismic Risk *Liu Xingwang, Wu Zhao, Liang Mingjian, He Wengui* (3796)

Editor in Chief Lai Xulong
Executive Editor Xie Xiaohong