

地质科技通报

原《地质科技情报》

2021 年 第 40 卷 第 4 期
(总第 199 期)

(国内外公开发行, 双月刊)
2021 年 7 月出版

目 次

• 资源地质与工程 •

北部湾盆地福山凹陷流沙港组致密油成藏条件及主控因素

…………… 秦秋寒, 雷 栋, 宋效文, 苏俊青, 任桂媛, 刘德生, 马庆林, 卢政环, 郭 浩, 廖飞燕, 时 阳(1)

琼东南盆地南部梅山组丘状体沉积特征及成因机制…………… 熊鹏飞, 姜 涛, 匡增桂, 程 聪, 任金锋, 赖洪飞(11)

利用高压压汞实验研究致密砂岩孔喉结构分形特征…………… 王 伟, 宋渊娟, 黄 静, 李亚辉, 陈朝兵, 朱玉双(22)

碳酸盐岩裂缝研究进展及发展趋势…………… 李长海, 赵 伦, 刘 波, 李建新, 陈烨菲, 张 宇(31)

鄂尔多斯盆地杭锦旗独贵加汗区带下石盒子组储层特征及孔隙演化…………… 李 智, 叶加仁, 曹 强, 余汉文, 张 威(49)

西藏羌塘地体中生代中—晚期不整合事件及其构造意义…………… 杜林涛, 李亚林, 刘 洋(61)

西湖凹陷天台斜坡带火山机构三维雕刻及成因机制解析…………… 望雪怡, 刘强虎, 朱红涛, 侯国伟, 秦兰芝(72)

含油气盆地微观裂缝脉体期次、成因与流体演化研究进展及展望…………… 陈少伟, 刘建章(81)

基于微观孔隙结构的低渗透砂岩储层分类评价…………… 汪新光, 张 冲, 张 辉, 杨朝强, 彭小东, 赵 楠, 王 磊(93)

渤海海域东部不同富油凹陷烃源岩生烃特征差异及意义…………… 于 彪, 刘建良, 杨贵丽, 刘可禹, 刘晓林(104)

铼金属矿床类型、元素赋存形式和富集机制…………… 周成胶, 张刚阳, 张丁川(115)

松辽盆地钱家店铀矿含铀岩系层序地层结构对铀成矿的约束…………… 曹民强(131)

• 工程地质与地质灾害 •

“5·12”汶川地震前后四川省主要地质灾害时空发育规律…………… 文广超, 苏林雪, 谢洪波, 陈红旗, 徐招峰(143)

库水位升降与降雨作用下大型滑坡体渗流稳定性分析…………… 唐军峰, 唐雪梅, 肖 鹏, 王 航, 李佳武(153)

基于多源数据的谭家湾滑坡变形机制及稳定性评价…………… 全德富, 谭 飞, 苏爱军, 宋洪斌, 鲁志春, 于 锦(162)

基于物理模型试验的多层滑带堆积层滑坡—抗滑桩受力特征…………… 张杰豪, 胡新丽, 徐 楚, 牛李飞, 杨登芳(171)

基于改进阻力系数法的悬挂式帷幕基坑渗流计算…………… 彭 伟, 建成梅, 马 郢, 陈凝涛(179)

基于滑坡灾害预警分级的应急处置措施…………… 覃瀚萱, 桂 蕾, 余玉婷, 李登华(187)

非均一性斜坡落石运动轨迹…………… 陈泰江, 章广成, 向 欣(196)

基于粗糙集理论与响应面法的老黏土膨胀敏感性分析方法

…………… 杜 毅, 李 凌, 晏鄂川, 李立峰, 周 游, 王 健, 陈胡昕(204)

• 环境地质与水文地质 •

面向绿色基础设施体系优化的矿业废弃地再生研究: 以大冶为例…………… 廖启鹏, 许红梅, 刘欣冉(214)

• 新技术新方法 •

利用 GS-LightGBM 机器学习模型识别致密砂岩地层岩性…………… 谷宇峰, 张道勇, 鲍志东, 郭海晓, 周立明, 任继红(224)

深度学习油气藏地质建模研究进展…………… 刘彦锋, 张文彪, 段太忠, 廉培庆, 李 蒙, 赵华伟(235)

测井数据小波变换在川中寒武系洗象池群层序地层划分中的应用…………… 曹庆超, 白壮壮, 李浩武, 张宁宁(242)

基于全岩心 CT 的遗迹化石定量表征新方法: 以加拿大麦凯 III 油砂区块为例

…………… 陈 浩, 黄继新, 聂志泉, 周久宁, 史晓星(252)

主 编: 王 华 副 主 编: 甘义群 李长冬 姜 涛 孙自永 杨 勇

编辑部主任: 刘江霞 责任编辑: 杨 勇 英文审稿: 严 瑾 刊名题字: 朱 立

期刊基本参数: CN42-1904/P * 1982 * b * A4 * 260 * zh * P * ¥25.00 * 1000 * 25 * 2021-7

BULLETIN OF GEOLOGICAL SCIENCE AND TECHNOLOGY

(Bimonthly)

Vol. 40 No. 4 Jul. 2021

CONTENTS

- Geological conditions and the main controlling factors for the tight oil accumulation in Liushagang Formation of Fushan Depression, Beibuwan Basin *Qin Qiuhan, Lei Dong, Song Xiaowen, Su Junqing, Ren Guiyuan, Liu Desheng, Ma Qinglin, Lu Zhenghuan, Guo Hao, Liao Feiyan, Shi Yang* (1)
- Sedimentary characteristics and origin of mounds in Meishan Formation, southern Qiongdongnan Basin *Xiong Pengfei, Jiang Tao, Kuang Zenggui, Cheng Cong, Ren Jinfeng, Lai Hongfei* (11)
- Fractal characteristics of pore-throat structure in tight sandstones using high-pressure mercury intrusion porosimetry *Wang Wei, Song Yuanjuan, Huang Jing, Li Yahui, Chen Zhaobing, Zhu Yushuang* (22)
- Research status and development trend of fractures in carbonate reservoir *Li Changhai, Zhao Lun, Liu Bo, Li Jianxin, Chen Yefei, Zhang Yu* (31)
- Reservoir characteristics and pore evolution of the Lower Shihezi Formation in Duguijiahan zone, Hangjinqi area, Ordos Basin *Li Zhi, Ye Jiaren, Cao Qiang, Yu Hanwen, Zhang Wei* (49)
- Unconformable event and its tectonic significance at Middle-Late Mesozoic of Qiangtang terrane, Tibet *Du Lintao, Li Yalin, Liu Yang* (61)
- 3-D engraving of volcanic mechanism in the Tiantai slope of Xihu Depression and its formation mechanism *Wang Xueyi, Liu Qianghu, Zhu Hongtao, Hou Guowei, Qin Lanzhi* (72)
- Research progress and prospects of the stages, genesis and fluid evolution of micro-fracture veins in petroliferous basins *Chen Shaowei, Liu Jianzhang* (81)
- Classification and evaluation of low-permeability sand reservoir based on micro-pore structure *Wang Xinguang, Zhang Chong, Zhang Hui, Yang Zhaoqiang, Peng Xiaodong, Zhao Nan, Wang Lei* (93)
- Hydrocarbon generation characteristics and signification of source rock in different oil-rich depressions in the eastern part of the Bohai Sea *Yu Biao, Liu Jianliang, Yang Guili, Liu Keyu, Liu Xiaolin* (104)
- Types, element occurrence forms and enrichment mechanisms of rhenium metal deposits *Zhou Chengjiao, Zhang Gangyang, Zhang Dingchuan* (115)
- Constraints of the sequence stratigraphic structure of uranium-bearing series on mineralization in Qianjiadian uranium deposit, Songliao Basin *Cao Minqiang* (131)
- Spatio-temporal development characteristics of major geohazards in Sichuan Province around "5 • 12" Wenchuan earthquake *Wen Guangchao, Su Linxue, Xie Hongbo, Chen Hongqi, Xu Zhaofeng* (143)
- Analysis of seepage stability of large-scale landslide under water-level fluctuation and rainfall *Tang Junfeng, Tang Xuemei, Xiao Peng, Wang Hang, Li Jiawu* (153)
- Deformation mechanism and stability evaluation of Tanjiawan landslide based on multi-source data *Tong Defu, Tan Fei, Su Aijun, Song Hongbin, Lu Zhichun, Yu Jin* (162)
- Mechanical characteristics of anti-slide pile of multi-layer sliding zone accumulation layer based on physical model test *Zhang Jiehao, Hu Xinli, Xu Chu, Niu Lifei, Yang Dengfang* (171)
- Seepage calculation of foundation with suspended curtain based on improved resistance coefficient method *Peng Yi, Cheng Jianmei, Ma Yun, Chen Ningyi* (179)
- Emergency measures based on early warning classification of landslide *Qin Hanxuan, Gui Lei, Yu Yuting, Li Denghua* (187)
- Trajectory of rockfall on the uniform slope *Chen Taijiang, Zhang Guangcheng, Xiang Xin* (196)
- Sensitivity analysis method of swelling of paleo-clay based on rough set theory and response surface method *Du Yi, Li Ling, Yan Echuan, Li Lifeng, Zhou You, Wang Jian, Chen Huxin* (204)
- Regeneration of mining wasteland in view of optimization of urban green infrastructure system: A case study of Daye *Liao Qipeng, Xu Hongmei, Liu Xinran* (214)
- Lithology prediction of tight sandstone formation using GS-LightGBM hybrid machine learning model *Gu Yufeng, Zhang Daoyong, Bao Zhidong, Guo Haixiao, Zhou Liming, Ren Jihong* (224)
- Progress of deep learning in oil and gas reservoir geological modeling *Liu Yanfeng, Zhang Wenbiao, Duan Taizhong, Lian Peiqing, Li Meng, Zhao Huawei* (235)
- Application of wavelet transformation of logging data in sequence stratigraphic division of Cambrian Xixiangchi Group in Central Sichuan Basin *Cao Qingchao, Bai Zhuangzhuang, Li Haowu, Zhang Ningning* (242)
- Quantitative characterization of ichnology based on CT scan: A case study of Mackay-III oil sands, Canada *Chen Hao, Huang Jixin, Nie Zhiquan, Zhou Jiuning, Shi Xiaoxing* (252)