

## 目次

## 水文地质

- 广东青莲水岩溶-裂隙水系统的地下水化学物质来源解析 ..... 许兰芳, 倪泽华, 涂世亮, 姜守俊, 黄文龙, 庄卓涵, 杨宏宇 (213)
- 广州北部隐伏岩溶区地下水水化学特征及成因分析 ..... 王忠忠, 胡飞跃, 贾 龙, 支兵发 (228)
- 巫山官渡河流域黑色岩系中镉元素在地下水系统中的迁移特征研究 ..... 刘永旺, 朱宗林, 李 海, 柯青青, 罗 波, 刘 进, 邓鑫钱, 张永文 (238)
- 三峡库区瞿塘峡至巫峡段消落带灰岩质量劣化特征 ..... 张钟远, 谭 磊, 赵 鹏, 余 姝, 白林丰, 曾德强, 靳 鹏 (250)
- 喀斯特地区不同尺度水碳耦合过程研究进展 ..... 张建春, 朱 江, 何昌德, 贾 智, 朱利菲, 乙 引, 龚记熠 (261)
- 西南某城区地下水“三氮”空间分布及风险管控研究 ..... 黄艳采, 金 波, 曾牡丹, 向 刚 (274)
- 肥城安驾庄岩溶型地热氡泉水化学特征及成因机理 ..... 白新飞, 胡彩萍, 宋津宇, 杨时骄, 郅 亮, 张 军, 于 超, 洪欢仁, 王 涛, 宋 亮 (283)
- 四川盆地边缘龙门山南段红层岩溶发育特征及控制因素 ..... 张小文, 王 川, 杨艳娜, 范时杰, 余 磊, 徐小青 (300)

## 灾害地质

- 安徽淮南矿区岩溶塌陷分布特征及成因模式 ..... 许光泉, 李 浩, 杨婷婷, 张海涛, 贺 彪 (316)
- 列车振动环境场覆盖型岩溶土洞塌陷的动力响应特性研究 ..... 师 海, 贾智磊, 白明洲, 张 晔, 孙子冰 (328)
- 跨孔电磁波 CT 法在不同工作模式下对小型溶洞的分辨能力研究 ..... 陈丰毅, 潘剑伟, 宋宏明, 杨 晨, 槐玉鹿 (340)
- 跨孔雷达层析成像方法定量评价岩溶发育程度研究 ..... 贾 龙, 张 毅, 蒙 彦, 李录娟, 潘宗源, 吴远斌, 殷仁朝 (351)
- 隧道突泥涌水致灾机理及防控技术研究 ..... 秦鹏飞, 赵亚敏, 宋 梦, 王文菁 (359)

## 油气地质

- 轮古西区块鹰山组岩溶储层地震响应特征及储层分布预测 ..... 关宝珠, 刘俊锋, 杨茂川, 杨新影 (370)
- 鄂尔多斯盆地太原组致密灰岩储层构造缝地质意义、预测及应用 ..... 付勋勋, 范立勇, 裴文超, 赵小会, 石 磊, 董国栋, 王怀厂, 刘晓鹏, 卢子兴, 殷亮亮, 高 星, 陈娟萍 (382)
- 四川盆地元坝地区中二叠统茅口组古岩溶作用与储层发育特征 ..... 季少聪, 张庆玉, 巴俊杰, 聂国权, 董红琪, 莫国宸, 张 萌 (398)
- 川中地区震旦系灯影组储层类型与测井识别 ..... 周 正, 贺洪举, 李大华, 张 烨, 陈洪凯, 王兴志, 于 涛, 何 丽, 苏 欢 (410)
- 川东地区中二叠统茅口组岩溶储层特征及其主控因素 ..... 杨 容, 杨西燕, 范存辉, 李 阳, 李 玥, 黄梓桑 (419)
- 高石梯区块震旦系灯四段台缘与台内综合对比及开发对策建议 ..... 胡 浩, 汪 敏, 隆 辉, 江 林, 沈秋媛, 吴 东, 田兴旺 (434)

# CARSOLOGICA SINICA

Vol. 44 No. 2 Apr. 2025

## CONTENTS

- Analysis of chemical substance sources in the groundwater of karst-fissure groundwater system in the Qinglian River, Guangdong Province, China  
..... *XU Lanfang, NI Zehua, TU Shiliang, JIANG Shoujun, HUANG Wenlong, ZHUANG Zhuohan, YANG Hongyu*(226)
- Analysis of hydrochemical characteristics and controlling factors of groundwater in the covered karst area of northern Guangzhou  
..... *WANG Zhongzhong, HU Feiyue, JIA Long, ZHI Bingfa*(236)
- Study on the migration characteristics of cadmium element in the black shales of the groundwater system in the Guandu River Basin of Wushan area  
..... *LIU Yongwang, ZHU Zonglin, LI Hai, KE Qingqing, LUO Bo, LIU Jin, DENG Xinqian, ZHANG Yongwen*(248)
- Degradation characteristics of limestone from the Qutang Gorge to Wuxia Gorge of the Three Gorges Reservoir area  
..... *ZHANG Zhongyuan, TAN Lei, ZHAO Peng, YU Shu, BAI Linfeng, ZENG Deqiang, JIN Peng*(260)
- Research progress on the water-carbon coupling processes at different scales in karst regions  
..... *ZHANG Jianchun, ZHU Jiang, HE Changde, JIA Zhi, ZHU Lifei, YI Yin, GONG Jiyi*(272)
- Research on the spatial distribution and risk control of "three forms of nitrogen" in groundwater in an urban area of southwest China  
..... *HUANG Yancai, JIN Bo, ZENG Mudan, XIANG Gang*(281)
- Chemical characteristics and genetic mechanism of karst geothermal radon spring in Anjiazhuang, Feicheng  
..... *BAI Xinfei, HU Caiping, SONG Jinyu, YANG Shijiao, QIE Liang, ZHANG Jun, YU Chao, HONG Huanren, WANG Tao, SONG Liang*(299)
- Development characteristics and controlling factors of red-bed karst in the southern section of Longmen Mountain at the edge of Sichuan Basin  
..... *ZHANG Xiaowen, WANG Chuan, YANG Yanna, FAN Shijie, YU Lei, XU Xiaoqing*(314)
- Distribution characteristics and genesis model of karst collapse in the Huainan area of Anhui Province  
..... *XU Guangquan, LI Hao, YANG Tingting, ZHANG Haitao, HE Biao*(326)
- Study on the dynamics response characteristics of covered soil-cave type karst collapse under train vibration environment  
..... *SHI Hai, JIA Zhilei, BAI Mingzhou, ZHANG Ye, SUN Zibing*(338)
- Research on the resolution of cross-hole electromagnetic wave CT method for small karst caves under different working patterns  
..... *CHEN Fengyi, PAN Jianwei, SONG Hongming, YANG Chen, KUI Yulu*(349)
- Karst development evaluation based on cross-hole radar tomography  
..... *JIA Long, ZHANG Yi, MENG Yan, LI Lujuan, PAN Zongyuan, WU Yuanbin, YIN Renchao*(357)
- Research on the mechanism and prevention technologies of mud and water inrush disasters in tunnels  
..... *QIN Pengfei, ZHAO Yamin, SONG Meng, WANG Wenjing*(369)
- Seismic response characteristics and reservoir distribution prediction of karst reservoirs in the Yingshan Formation of the Lungxi block  
..... *GUAN Baozhu, LIU Junfeng, YANG Maochuan, YANG Xinying*(380)
- Geological significance, prediction and application of structural fractures in compact limestone reservoirs of the Taiyuan Formation, the Ordos Basin  
..... *FU Xunxun, FAN Liyong, PEI Wenchao, ZHAO Xiaohui, SHI Lei, DONG Guodong, WANG Huaichang, LIU Xiaopeng, LU Zixing, YIN Liangliang, GAO Xing, CHEN Juanping*(396)
- Characteristics of paleokarst processes and reservoir development of the middle Permian Maokou Formation in the Yuanba area, Sichuan Basin  
..... *JI Shaocong, ZHANG Qingyu, BA Junjie, NIE Guoquan, DONG Hongqi, MO Guochen, ZHANG Meng*(408)
- Reservoir types and well logging identification of the Sinian Dengying Formation in the Central Sichuan region  
..... *ZHOU Zheng, HE Hongju, LI Dahua, ZHANG Ye, CHEN Hongkai, WANG Xingzhi, YU Tao, HE Li, SU Huan*(417)
- Characteristics and dominant controlling factors of karst reservoirs in the middle Permian Maokou Formation of the eastern Sichuan region  
..... *YANG Rong, YANG Xiyan, FAN Cunhui, LI Yang, LI Yue, HUANG Zisang*(432)
- Comprehensive comparison and development strategy suggestions between the edge and interior of the fourth section of the Sinian series lumps in the Gaoshiti block  
..... *HU Hao, WANG Min, LONG Hui, JIANG Lin, SHEN Qiuyuan, WU Dong, TIAN Xingwang*(443)

**Editor-in-Chief :** Prof. *JIANG Zhongcheng*

**Duty Editor :** Prof. *ZHANG Ling HUANG Chenhui YANG Yang*

**English Translation Checked by** Miss *ZHUANG Yan* Prof. *WANG Wei*