

# 地下空间与工程学报

第 20 卷第 4 期

(总第 155 期) 双月刊

2024 年 8 月

## 目 次

### · 地下空间开发利用 ·

- 地下空间规划设计研究热点与趋势分析 ..... 邵继中, 张雨, 李坤洋, 郭文娟, 李晓雯(1051)  
客货“共线不共车”模式下地铁货运站点选择 ..... 王晓平, 张子宣(1062)  
地下商业空间活力影响因素探究 ..... 商谦, 孟繁迪(1073)  
地下环路交织区合理长度计算方法 ..... 曹煜, 王永岗(1086)

### · 理论与试验研究 ·

- 基于数据融合的隧道结构安全性能感知体系框架 ..... 罗彦斌, 陈建勋, 陈辉, 王传武(1097)  
红黏土动剪切模量比与阻尼比概率分布特征研究 ..... 刘娟, 蒙云龙, 许国栋, 兰景岩(1108)  
超高应力区脆性硬岩洞室围岩分类修正研究 ..... 马行东, 李鹏, 袁国庆, 贾翔, 邢云腾(1117)  
土体抗拉强度试验研究方法的综述 ..... 孙一清, 沈振中, 徐力群, 张宏伟, 甘磊(1124)  
真三轴下砂岩水力压裂物理模拟与声发射特征 ..... 姜永东, 谢成龙, 宋晓, 刘正杰(1145)  
单轴压缩垃圾液污染黄土电阻率特征试验研究 ..... 刘华, 冯洪峰, 王宝, 孟令俭, 胡文乐(1152)  
水平非均匀场地中油气管道地震响应分析及试验 ..... 代建波, 朱江, 王赵诚, 马静, 赵泽文(1160)  
黏性地层盾构刀盘泥饼固结硬化试验研究 ..... 王宇博, 周凯歌, 方勇, 刘四进, 马浴阳(1169)  
深部巷道围岩分区破裂带理论及试验对比研究 ..... 黎林梅, 涂一郎, 曾宪任, 谢洪阳(1180)  
石灰岩微波致裂规律研究 ..... 古傲林, 马占国, 文佳豪, 李阳, 陈达(1191)  
冲击地压巷道围岩改性研究 ..... 刘业献, 王洪涛, 翟勃, 张寅, 李哲(1210)  
冻融循环下低液限盐渍化粉土力学特性研究 ..... 包卫星, 秦川, 李伟, 刘亚伦, 陈锐(1223)  
近海黏性土中桩土界面剪切特性与含水率效应 ..... 王永洪, 王鑫, 张明义, 李长河, 王东雷(1236)  
聚丙烯纤维再生混凝土主破裂前兆特征研究 ..... 杨欣, 唐宇, 梁宁慧(1247)  
地下盐岩溶腔储库单井水平溶解建造流体运移研究 ..... 李超, 梁卫国, 张胜利, 肖宁, 李静(1257)

### · 设计、施工、监测 ·

- 溶洞上方桩基极限承载力计算 ..... 张红卫(1266)  
软岩地基斜锚-短桩复合基础水平承载性能研究 ..... 向城名, 田雷, 侯中伟, 乾增珍(1275)  
基于离散裂隙网络的围岩注浆加固规律研究 ..... 钟杰, 李博, 宋振宇, 邹良超(1286)  
基坑群开挖引起邻近隧道附加应力研究 ..... 刘子涵, 王宏谦, 张凯, 邓稀肥, 朱建波(1298)  
冲-切混合钻头工作动态分析与破岩效率研究 ..... 谢荣斌, 崔国杰, 刘伟, 杨迎新, 徐光达(1309)  
超长倾斜联络通道冻结施工全过程有限元分析 ..... 徐亚峰, 童俊, 陈玮, 马宏宇, 涂福彬(1317)  
基于光纤感测的急倾斜煤层采动围岩变形特征研究 ..... 王毅, 杜文刚, 张丁丁, 袁强(1327)  
基于探地雷达时频特征的水泥路面脱空识别 ..... 张军, 姜文涛, 余秋琴, 李有鑫, 罗婷倚(1334)  
基于水文地质综合勘察的隧道导水特性研究 ..... 程小勇(1345)  
带井电法在城市障碍区间探测中的应用研究 ..... 杨亮, 周聰, 王轲, 姚振岸, 谢尚平(1357)

### · 防灾与环境 ·

- 隧道洞外减光棚光学参数优化分析研究 ..... 万利, 饶炎, 马非(1367)  
深埋隧道微震事件规律及岩爆前兆微震信息研究 ..... 熊炎林, 陈冠甫, 刘晓丽(1375)  
考虑裂隙影响的桩端岩溶顶板破坏形态与安全厚度 ..... 郭建民, 杨春山, 黄钺, 张松涛, 曾炯坤(1382)  
金川二矿区上盘贫矿采矿方法优选及采动效应分析 ..... 盛佳, 万文, 张海云, 王玉丁, 李向东(1389)

# 地下空间与工程学报

第 20 卷第 4 期

(总第 155 期) 双月刊

2024 年 8 月

## 目 次

Research Focus and Trend Analysis of Underground Space Planning and Design .....	Shao Jizhong, Zhang Yu, Li Kunyang, Guo Wenjuan, Li Xiaowen(1051)
The Selection of Metro Freight Stations under the Mode of "Shared Lines but not Shared Trains" .....	Wang Xiaoping, Zhang Zixuan(1062)
Factors Affecting the Vitality of Underground Commercial Space .....	Shang Qian, Meng Fandi(1073)
Calculation Method for the Reasonable Length of Underground Ring Road Weaving Segment .....	Cao Yu, Wang Yonggang(1086)
The Framework of Tunnel Structure Safety Performance Perception System Based on Data Fusion .....	Luo Yanbin, Chen Jianxun, Chen Hui, Wang Chuanwu(1097)
Study on Probability Distribution Characteristics of Dynamic Shear Modulus and Damping Ratio of Red Clay .....	Liu Juan, Meng Yunlong, Xu Guodong, Lan Jingyan(1108)
Study on Classification and Correction of Surrounding Rock of Brittle Hard Rock Cavern in Super High Stress Area .....	Ma Xingdong, Li Peng, Yuan Guoqing, Jia Xiang, Xing Yunteng(1117)
Review of Experimental Testing Methods of Soil Tensile Strength .....	Sun Yiqing, Shen Zhenzhong, Xu Liqun, Zhang Hongwei, Gan Lei(1124)
Physical Simulation and Acoustic Emission Characteristics of Sandstone Hydraulic Fracturing under True Triaxial .....	Jiang Yongdong, Xie Chenglong, Song Xiao, Liu Zhengjie(1145)
Experiment Study on Resistivity Characteristics of Landfill Leachate Contaminated Loess in Uniaxial Compression Process .....	Liu Hua, Feng Hongfeng, Wang Bao, Meng Lingjian, Hu Wenle(1152)
Seismic Response Analysis and Test of Oil and Gas Pipeline in Horizontal Inhomogeneous Soil .....	Dai Jianbo, Zhu Jiang, Wang Zhaocheng, Ma Jing, Zhao Zewen(1160)
Experimental Study on Consolidation and Hardening of Mud Cake of Shield Cutterhead in Cohesive Stratum .....	Wang Yubo, Zhou Kaige, Fang Yong, Liu Sijin, Ma Yuyang(1169)
Comparison Research on Experiments and Theory of Zonal Disintegration Belt in Deep Tunnel Surrounding Rock .....	Li Linmei, Tu Yilang, Zeng Xianren, Xie Hongyang(1180)
Study on the Law of Microwave Fracture of Limestone .....	Gu Aolin, Ma Zhanguo, Wen Jiahao, Li Yang, Chen Da(1191)
Study on Surrounding Rock Modification of Rock Burst Roadway .....	Liu Yexian, Wang Hongtao, Zhai Bo, Zhang Yin, Li Zhe(1210)
Study on the Mechanical Characteristics of Salinized Silt Soil with Low Liquid Limit under Freeze-Thaw Cycle .....	Bao Weixing, Qin Chuan, Li Wei, Liu Yalun, Chen Rui(1223)
Effects of Water Contentand Shear Properties on Pile-soil Interface of Offshore Cohesive Soil .....	Wang Yonghong, Wang Xin ,Zhang mingyi, Li Changhe, Wang Donglei(1236)
Study on Main Fracture Precursor Characteristics of Polypropylene Fiber Recycled Concrete .....	Yang Xin, Tang Yu, Liang Ninghui(1247)
Study on Fluid Migration of SWRH Leaching Methodof Salt Cavern Underground Storage .....	Li Chao, Liang Weigu, Zhang Shengli, Xiao Ning, Li Jing(1257)
Ultimate Bearing Capacity of A Pile Foundation above A Karst Cave .....	Zhang Hongwei(1266)
Investigation on Lateral Bearing Performance of Short Rock-Socketed Pile Combined with Inclined Anchor Bolts in Soft Rock Mass .....	Xiang Chengming, Tian Lei, Hou Zhongwei, Qian Zengzhen(1275)
Numerical Study on Grouting Reinforcement Effect on Fractured Rock Masses of Tunnels Based on Discrete Fracture Networks .....	Zhong Jie, Li Bo, Song Zhenyu, Zou Liangchao(1286)
Study on Additional Stress of Adjacent Tunnel Caused by Excavation of Foundation Pit Group .....	Liu Zihan, Wang Hongqian, Zhang Kai, Deng Xifei, Deng Nengwei, Zhu Jianbo(1298)
Working Dynamics of Impact Scraping Hybrid Drill Bits Analysis and Research on Rock Breaking Efficiency .....	Xie Rongbin, Cui Guojie, Liu Wei, Yang Yingxin, Xu Guangda(1309)
FEM Analysis of the Whole Construction Process of Super-Long Inclined Connecting Passage by Freezing Method .....	Xu Yafeng, Tong Jun, Chen Wei, Ma Hongyu, Tu Fubin(1317)
Study on Deformation Characteristics of Surrounding Rocks in Steeply Inclined Coal Seams Induced by Mining Using Fiber Optic Sensing .....	Wang Yi, Du Wengang, Zhang Dingding, Yuan Qiang(1327)
Identification of Cement Pavement Defects Based on GPR Time-Frequency Features .....	Zhang Jun, Jiang Wentao, Yu Qiuqin, Li Youxin, Luo Tingyi(1334)
Study on Water Diversion Characteristics of Tunnel Based on Hydrogeological Comprehensive Investigation .....	Cheng Xiaoyong(1345)
Research on Application of Resistivity Method with Borehole in Detection of Urban Obstacle Interval .....	Yang Liang, Zhou Cong, Wang Ke, Yao Zhenan, Xie Shangping(1357)
Study on Optimization of Optical Parameters of Dimming Shed outside Tunnel .....	Wan Li, Rao Yan, Ma Fei(1367)
Research on Microseismic Event Law of Deep Buried Tunnel and Microseismic Information of Rock Burst Precursor .....	Xiong Yanlin, Chen Guanfu, Liu Xiaoli(1375)
Failure Form and Safe Thickness of Pile Karst Roof Considering the Influence of Cracks .....	Guo Jianmin, Yang Chunshan, Huang Yue, Zhang Songtao, Zeng Jiongkun(1382)
Optimization of Mining Methods and Analysis of Mining Effect for Hanging Wall Low-Grade Ores in Jinchuan No. 2 Mine Area .....	Sheng Jia, Wan Wen, Zhang Haiyun, Wang Yuding, Li Xiangdong(1389)