



中国精品科技期刊
 中文核心期刊 EI 收录期刊
 中国最具国际影响力学术期刊
 中国科技期刊卓越行动计划梯队期刊



Q K 2 2 3 1 8 5 2

ISSN 1000-7598

CN 42-1199/O3

岩土力学

Rock and Soil Mechanics

Vol.43 No.7

2022

中国科学院武汉岩土力学研究所
 Institute of Rock and Soil Mechanics
 Chinese Academy of Sciences

ISSN 1000-7598



9 771000 759229 07>

目 次

基础理论与实验研究

- 干湿过程中花岗岩残积土抗拉强度变化研究·····汤连生,王 昊,孙银磊,等 (1749)
- 干湿循环作用下单裂隙炭质页岩能量演化与破坏特征研究·····刘新喜,李 玉,范子坚,等 (1761)
- 结构性对膨胀土收缩特性影响的试验研究·····刘观仕,赵守道,牟 智,等 (1772)
- 钙质砂一维蠕变分形破碎特性宏微观试验研究·····陈 宾,邓 坚,胡杰铭,等 (1781)
- 循环载荷下含水砂岩裂纹演化与损伤特征试验研究·····杨 科,张寨男,池小楼,等 (1791)
- 平均有效应力对煤系页岩瓦斯微观吸附-解吸特性影响试验研究·····田虎楠,唐巨鹏,潘一山,等 (1803)
- 非饱和压实土率敏性及蠕变时效特征试验研究·····王智超,罗 磊,田英辉,等 (1816)
- 垃圾土中排水柱孔扩张问题弹塑性解·····赵 云,杨忠方,凌道盛,等 (1825)
- 盾构隧道环向开挖面破坏机制及剪胀效应研究·····张 箭,戚瑞宇,宗晶瑶,等 (1833)
- 延安压实黄土土-水特征曲线的快速预测方法·····王海曼,倪万魁,刘 魁 (1845)
- 基于破损参数简化的二元介质冻结粉细砂土本构模型·····张树明,蒋关鲁,叶雄威,等 (1854)
- 小净距隧道中夹岩对拉锚杆控制机制与工程应用·····李 然,王圣涛,张顶立,等 (1865)

岩土工程研究

- 复合地层隧道围岩强度实时估算研究·····张海龙,汤 杨,任 汀,等 (1877)
- 富水管道型岩溶隧道衬砌结构力学响应特征研究·····樊浩博,周定坤,刘 勇,等 (1884)
- 深圳岩溶空间发育规律统计分析·····刘 动,林沛元,陈贤颖,等 (1899)
- 软弱厚煤层沿空留巷变形破坏特征及控制研究·····王 凯,杨宝贵,王鹏宇,等 (1913)
- 关于偏心荷载下地基承载力的验算方法·····宋二祥,陈星屹,林世杰 (1925)
- 大断面管幕法隧道群管顶进的地表位移规律研究·····唐 正,王洪新,孙德安,等 (1933)
- 超大型离心机基础自振特性研究·····王鸿振,张春生,黄 维,等 (1942)

数值分析

- Malvern Hills 边坡溃曲破坏分析及数值流形法模拟·····王秋生,张瑞涛,郑 宏 (1951)
- 可变形圆化多边形离散单元法·····周洋诗琦,赵兰浩,邵琳玉,等 (1961)
- 考虑多晶冰软化特性的弹塑性损伤本构模型开发及应用·····张 革,曹 玲,王成汤 (1969)
- 基于复杂网络的岩土颗粒材料分散性失稳先兆研究·····杨晓娟,马 刚,周 恒,等 (1978)
- 结构性海洋黏土损伤模型的二次开发及应用·····袁 宇,刘 润,付登锋,等 (1989)
- Post-failure analysis of landslides in spatially varying soil deposits using stochastic material point method·····MA Guo-tao, REZANIA Mohammad, MOUSAVI NEZHAD Mohaddeseh, 等 (2003)
- 考虑土体动力特征参数相关性的工程场地随机地震反应分析·····钟紫蓝,史跃波,李锦强,等 (2015)

测试技术

- 土体含水率监测的移动点热源法研究·····张婵青,何凤飞,姜顺航,等 (2025)

简 讯

- 《岩土力学》2021 年第 10 期被 EI 收录论文(27 篇,收录率 100%)·····(2002)
- 《岩土力学》2021 年第 11 期被 EI 收录论文(27 篇,收录率 100%)·····(2034)
- 《岩土力学》征稿简则·····(封二)

期刊基本参数: CN42-1199/O3*1979*m*A4*286*zh*P* ¥ 60.00*2000*27*2022-07

本期责任编辑: 田静 排版: 胡惠珍

CONTENTS

Change of tensile strength of granite residual soil during drying and wetting.....	TANG Lian-sheng, WANG Hao, SUN Yin-lei, et al (1749)
Energy evolution and failure characteristics of single fissure carbonaceous shale under drying-wetting cycles.....	LIU Xin-xi, LI Yu, FAN Zi-jian, et al (1761)
Experimental study of the influence of structure on the shrinkage characteristics of expansive soil.....	LIU Guan-shi, ZHAO Shou-dao, MOU Zhi, et al (1772)
Macroscopic and microscopic experimental study on fractal fragmentation characteristics of calcareous sand during one-dimensional compression creep.....	CHEN Bin, DENG Jian, HU Jie-ming, et al (1781)
Experimental study on crack evolution and damage characteristics of water bearing sandstone under cyclic loading.....	YANG Ke, ZHANG Zhai-nan, CHI Xiao-lou, et al (1791)
Experimental study on the effect of average effective stress on micro adsorption and desorption characteristics of coal shale gas.....	TIAN Hu-nan, TANG Ju-peng, PAN Yi-shan, et al (1803)
Experimental study on time-dependent characteristics of rate-sensitivity and creep of unsaturated compacted soil.....	WANG Zhi-chao, LUO Lei, TIAN Ying-hui, et al (1816)
Drained elasto-plastic solution for cylindrical cavity expansion in refuse soil.....	ZHAO Yun, YANG Zhong-fang, LING Dao-sheng, et al (1825)
Failure mechanism of shield tunnel circumferential excavation face and the influence of the dilatancy effect on the tunnel stability.....	ZHANG Jian, QI Rui-yu, ZONG Jing-yao, et al (1833)
Rapid prediction method of soil-water characteristic curve of Yan'an compacted loess.....	WANG Hai-man, NI Wan-kui, LIU Kui (1845)
A constitutive model for frozen silty sand based on binary medium model simplified by breakage parameter.....	ZHANG Shu-ming, JIANG Guan-lu, YE Xiong-wei, et al (1854)
Control mechanism and engineering application of pillar-reinforcing bolt in closely spaced tunnels.....	LI Ran, WANG Sheng-tao, ZHANG Ding-li, et al (1865)
Real-time estimation of surrounding rock strength in composite strata tunnels.....	ZHANG Hai-long, TANG Yang, RENG Ting, et al (1877)
Mechanical response characteristics of lining structure of pipeline karst tunnels in water-rich areas.....	FAN Hao-bo, ZHOU Ding-kun, LIU Yong, et al (1884)
Statistical analysis of karst spatial distribution in Shenzhen.....	LIU Dong, LIN Pei-yuan, CHEN Xian-ying, et al (1899)
Deformation and failure characteristics of gob-side entry retaining in soft and thick coal seam and the control technology.....	WANG Kai, YANG Bao-gui, WANG Peng-yu, et al (1913)
On the checking methods for bearing capacity of foundation under eccentric loading.....	SONG Er-xiang, CHEN Xing-yi, LIN Shi-jie (1925)
Surface displacement during pipe roof construction of pipe-jacking group with large section.....	TANG Zheng, WANG Hong-xin, SUN De-an, et al (1933)
Vibration characteristics of super large centrifuge foundation.....	WANG Hong-zhen, ZHANG Chun-sheng, HUANG Wei, et al (1942)
Buckling failure analysis and numerical manifold method simulation for Malvern Hills slope.....	WANG Qiu-sheng, ZHANG Rui-tao, ZHENG Hong (1951)
A deformable spheropolygon-based discrete element method.....	ZHOU Yang-shi-qi, ZHAO Lan-hao, SHAO Lin-yu, et al (1961)
Development and application of elastic-plastic damage constitutive model considering softening characteristics of polycrystalline ice.....	ZHANG Ge, CAO Ling, WANG Cheng-tang (1969)
Study on precursors of diffuse instability of granular materials based on complex network theory.....	YANG Xiao-juan, MA Gang, ZHOU Heng, et al (1978)
Secondary development and application of structural marine clay damage model.....	YUAN Yu, LIU Run, FU Deng-feng, et al (1989)
Post-failure analysis of landslides in spatially varying soil deposits using stochastic material point method.....	MA Guo-tao, REZANIA Mohammad, MOUSAVI NEZHAD Mohaddeseh, et al (2003)
Stochastic seismic response analysis of engineering site considering correlations of critical soil dynamic parameters.....	ZHONG Zi-lan, SHI Yue-bo, LI Jin-qiang, et al (2015)
Vibration characteristics of super large centrifuge foundation.....	ZHANG Chan-qing, HE Feng-fei, JIANG Shun-hang, et al (2025)

《岩土力学》第九届编委会和编辑部组成人员名单

主 编	孔令伟							
	王思敬	白世伟	陈正汉	郑颖人	葛修润			
	马 巍	王 浩	王川婴	王水林	王立忠	王明年	王建华	王洪新
	韦昌富	介玉新	邓建辉	孔令伟	尹光志	卢应发	白 冰	冯夏庭
	冯守中	朱长歧	任伟中	刘 建	刘汉龙	刘传正	刘忠玉	刘泉声
	邬爱清	年廷凯	孙德安	杨光华	杨启贵	杨典森	杨春和	李 琦
	李小春	李术才	李邵军	李典庆	李建林	李建春	李海波	李银平
	李新平	何满潮	邹维列	汪 稔	张 嘎	张友良	张玉军	张传庆
	张建海	张勇慧	张家发	张强勇	陈 健	陈卫忠	陈仁朋	陈从新
	陈晓平	陈善雄	邵生俊	周 平	周 伟	周 辉	周正明	周创兵
	周顺华	郑 刚	郑 宏	郑俊杰	金 衍	孟庆山	胡大伟	赵明华
	侯公羽	施 斌	姚仰平	姚海林	徐长节	高玉峰	唐春安	唐辉明
	梅国雄	黄宏伟	黄茂松	曹文贵	盛 谦	梁 冰	章为民	韩 焯
	温彦峰	蒋明镜	焦玉勇	蔡袁强	廖红建	薛 强		
	编辑部成员	周 平	杨为民	郭 茜	丁 晓			

Editorial Board of Rock and Soil Mechanics (2017 – 2021)

Editor-in-chief	Lingwei Kong							
Advisors	Sijing Wang	Shiwei Bai	Zhengan Chen	Yingren Zheng	Xiurun Ge			
Editorial Board Members	Wei Ma	Hao Wang	Chuanying Wang	Shuilin Wang	Lizhong Wang	Mingnian Wang	Jianhua Wang	Hongxin Wang
	Changfu Wei	Yuxin Jie	Jianhui Deng	Lingwei Kong	Guangzhi Yin	Yingfa Lu	Bing Bai	Xiating Feng
	Shouzhong Feng	Changqi Zhu	Weizhong Ren	Jian Liu	Hanlong Liu	Chuanzheng Liu	Zhongyu Liu	Quansheng Liu
	Aiqing Wu	Tingkai Nian	Dean Sun	Guanghua Yang	Qigui Yang	Diansen Yang	Chunhe Yang	Qi Li
	Xiaochun Li	Shucui Li	Shaojun Li	Dianqing Li	Jianlin Li	Jianchun Li	Haibo Li	Yinping Li
	Xiping Li	Manchao He	Weilie Zou	Ren Wang	Ga Zhang	Youliang Zhang	Yujun Zhang	Chuanqing Zhang
	Jianhai Zhang	Yonghui Zhang	Jiafa Zhang	Qiangyong Zhang	Jian Chen	Weizhong Chen	Renpeng Chen	Congxin Chen
	Xiaoping Chen	Shanxiong Chen	Shengjun Shao	Ping Zhou	Wei Zhou	Hui Zhou	Zhengming Zhou	Chuangbing Zhou
	Shunhua Zhou	Gang Zheng	Hong Zheng	Junjie Zheng	Yan Jin	Qingshan Meng	Dawei Hu	Minghua Zhao
	Gongyu Hou	Bin Shi	Yangping Yao	Hailin Yao	Changjie Xu	Yufeng Gao	Chunan Tang	Huiming Tang
	Guoxiong Mei	Hongwei Huang	Maosong Huang	Wengui Cao	Qian Sheng	Bing Liang	Weimin Zhang	Xuan Han
	Yanfeng Wen	Mingjing Jiang	Yuyong Jiao	Yuanqiang Cai	Hongjian Liao	Qiang Xuc		
Editorial Staff	Ping Zhou	Weimin Yang	Qian Guo	Xiao Ding				

岩 土 力 学

Yantu Lixue

(1979年创刊 月刊 每月10日出版)
2022年7月 第43卷 第7期 (总343)

Rock and Soil Mechanics

(Monthly, Started in 1979)
Vol.43 No.7 (Total 343) Jul. 2022

主管单位 中国科学院
主办单位 中国科学院武汉岩土力学研究所
编辑出版 《岩土力学》编辑部
主 编 孔令伟
地 址 武汉市武昌小洪山
中国科学院武汉岩土力学研究所 430071
印 刷 武汉中科兴业印务有限公司
国内发行 湖北省邮政报刊发行局
国外发行 中国国际图书贸易总公司 (中国国际书店)
北京 399 信箱
电话: (027) 87198484 87199252 (传真)
E-mail: ytlx@whrsm.ac.cn

Competent Authority by: Chinese Academy of Sciences
Sponsored by: Institute of Rock and Soil Mechanics, Chinese Academy of Sciences
Edited and Published by: Editorial Office of Rock and Soil Mechanics
Editor-in-Chief: Lingwei Kong
Address: Institute of Rock and Soil Mechanics, Chinese Academy of Sciences, Wuhan 430071, China
Printed by: Wuhan Zhongkexingye Print Co., Ltd.
Distributed by: Hubei Bureau for Distribution of Newspapers and Journals
Distributed Abroad by: China International Book Trading Corporation (GUOJI SHUDIAN) P. O. Box 399, Beijing, China
Tel.: (027)87198484 87199252 (Fax)
http: // ytlx.whrsm.ac.cn/, ytlx.chinajournal.net.cn/

ISSN 1000-7598 广告经营许可证号: 4200003300074 邮发代号: 38-383 国外代号: Q4097 RMB: ¥60
CN 42-1199/O3 Advertising License Number: Postal Distributing Code: 38-383 (China), Q4097 (Overseas) USD: \$ 60