



国家自然科学基金资助



中国科协精品科技期刊工程项目

# 岩石力学与工程学报

2011年6月15日 第30卷 第6期(总第241期)

## 目 次

冲击载荷作用下硬岩层裂破坏的理论和试验研究	李夕兵, 陶 明, 宫凤强, 殷志强, 杜 坤 (1081)
深埋隧洞岩体开挖瞬态卸荷机制及等效数值模拟	卢文波, 杨建华, 陈 明, 周创兵 (1089)
深部岩体开挖方式对损伤区影响的试验研究	严 鹏, 卢文波, 陈 明, 单治钢, 陈祥荣 (1097)
甘肃北山地区深部花岗岩的热开裂试验研究	左建平, 周宏伟, 方 园, 孟冰冰, 彭瑞东 (1107)
多轴应力对深埋硬岩破裂行为的影响研究	潘鹏志, 冯夏庭, 邱士利, 周 辉 (1116)
深埋硬岩隧洞岩爆倾向性指标 RVI 的建立及验证	邱士利, 冯夏庭, 张传庆, 吴文平 (1126)
爆炸振动对塑性混凝土防渗墙的影响	夏 祥, 李海波, 于 崇 (1142)
深地下坑道衬砌结构抗局部冲击计算方法研究	冯淑芳, 王明洋, 任广昊, 李 杰 (1149)
爆炸荷载下缺陷岩体的动态响应	朱哲明, 李元鑫, 周志荣, 冉 旭, 金昕星 (1157)
大规模开采矿山地震视应力和变形与区域性危险地震预测	唐礼忠, 汪令辉, 张 君, 李夕兵 (1168)
三维动静组合加载下岩石力学特性试验初探	宫凤强, 李夕兵, 刘希灵 (1179)
地下厂房围岩松动圈声波拟合及监测反馈分析	张建海, 胡著秀, 杨永涛, 魏进兵, 邓建辉 (1191)
单轴压缩下含预制孔洞板状花岗岩试样力学响应的试验和数值研究	李地元, 李夕兵, 李春林, 王毅远 (1198)
裂隙岩体的一体两介质模型抗剪性能研究	易 成, 郝 彬, 朱红光, 王洪涛, 刘 征 (1207)
大采高多断层工作面综放诱发地表沉陷观测及数值分析	杨建立, 左建平, 孙 凯, 孟冰冰, 林 轩 (1216)
基于模糊数学的 TBM 施工岩体质量分级研究	祁生文, 伍法权 (1225)
岩石材料微裂隙演化的 CT 识别	朱红光, 谢和平, 易 成, 刘 征, 刘慧欣, 王洪涛 (1230)
岩体结构均质区划分的体视学方法研究初探	张国强, 张 茹, 赵小平, 邓建辉, 费文平 (1239)
深部围岩变形与破坏模型及数值方法研究	李文培, 王明洋, 范鹏贤, 邓宏见 (1250)
压密试验中破碎岩石压密特性的本构方程及数值模拟分析	雷 鸣, 羽柴公博, 福井胜则, 大久保诚介 (1258)
落石碰撞恢复系数的现场试验与数值计算	章广成, 向 欣, 唐辉明 (1266)
软岩的旋转触探参数与力学参数的内在关系研究	宋 玲, 李 宁, 李 赛 (1274)
“三软”煤层冲击地压诱导煤与瓦斯突出力学机制研究	李 铁, 梅婷婷, 李国旗, 徐守仁, 杨建留, 董 豪 (1283)
基于双重逾渗模型的裂隙多孔介质连通性研究	郑 委, 鲁晓兵, 刘庆杰, 张旭辉 (1289)

### 博士论文摘要

黄土地震陷与桩基负摩阻力现场试验研究	孙军杰 (I)
奥陶系顶部岩层渗流力学特性及作为隔水关键层应用研究	白海波 (II)

### 动 态

本刊2011年第1~4期 EI COMPENDEX 分别收录 22, 27, 24, 24 篇(100%收录)	(1088)
下期内容预告	(1115)
全国岩石动力学专题研讨会在西安召开	(1215)

责任编辑: 黄 玲 吴火珍 排版: 陈金辉

期刊基本参数 CN 42 - 1397/O3\*1982\*m\*A4\*224\*zh\*P\* ¥40.00\*3300\*24\*2011 - 06

万方数据

# Chinese Journal of Rock Mechanics and Engineering

Vol. 30, No. 6 (Total No. 241) June 15, 2011

## CONTENTS

Theoretical and Experimental Study of Hard Rock Spalling Fracture under Impact Dynamic Loading .....	.....	LI Xibing, TAO Ming, GONG Fengqiang, YIN Zhiqiang, DU Kun (1081)
Mechanism and Equivalent Numerical Simulation of Transient Release of Excavation Load for Deep Tunnel .....	.....	LU Wenbo, YANG Jianhua, CHEN Ming, ZHOU Chuangbing (1089)
In-situ Test Research on Influence of Excavation Method on Induced Damage Zone in Deep Tunnel .....	.....	YAN Peng, LU Wenbo, CHEN Ming, SHAN Zhigang, CHEN Xiangrong (1097)
Experimental Research on Thermal Cracking of Deep Granite in Beishan Region, Gansu Province .....	.....	ZUO Jianping, ZHOU Hongwei, FANG Yuan, MENG Bingbing, PENG Ruidong (1107)
Study of Failure Behavior of Deep Hard Rock under Polyaxial Stress Conditions .....	.....	PAN Pengzhi, FENG Xiating, QIU Shili, ZHOU Hui (1116)
Development and Validation of Rockburst Vulnerability Index(RVI) In Deep Hard Rock Tunnels .....	.....	QIU Shili, FENG Xiating, ZHANG Chuanqing, WU Wenping (1126)
Analysis of Effect of Blasting Vibration on Plastic Concrete Cut-off Wall .....	.....	XIA Xiang, LI Haibo, YU Chong (1142)
Research on Calculation Method for Local Impact of Deep Tunnel Lining Structure .....	.....	FENG Shufang, WANG Mingyang, REN Guanghao, LI Jie (1149)
Dynamic Response of Defected Rock under Blasting Load .....	.....	ZHU Zheming, LI Yuanxin, ZHOU Zhirong, RAN Xu, JIN Xinxing (1157)
Seismic Apparent Stress and Deformation in a Deep Mine under Large-scale Mining and Areal Hazardous Seismic Prediction .....	.....	TANG Lizhong, WANG Linghui, ZHANG Jun, LI Xibing (1168)
Preliminary Experimental Study of Characteristics of Rock Subjected to 3D Coupled Static and Dynamic Loads .....	.....	GONG Fengqiang, LI Xibing, LIU Xiling (1179)
Acoustic Velocity Fitting and Monitoring Feedback Analysis of Surrounding Rock Loosening Zone in Underground Powerhouse .....	.....	ZHANG Jianhai, HU Zhuxiu, YANG Yongtao, WEI Jinbing, DENG Jianhui (1191)
Experimental and Numerical Studies of Mechanical Response of Plate-shape Granite Samples Containing Prefabricated Holes under Uniaxial Compression .....	.....	LI Diyuan, LI Xibing, LI C Charlie, WONG Louis Ngai Yuen (1198)
Experimental Investigation on Shear Performance of Uni-body Bi-material Mechanical Model for Fissured Rocks .....	.....	YI Cheng, HAO Bin, ZHU Hongguang, WANG Hongtao, LIU Zheng (1207)
In-situ Observation and Numerical Analysis of Surface Subsidence of High Working Face with Multi-fault Induced by Full-mechanized Mining Activity .....	.....	YANG Jianli, ZUO Jianping, SUN Kai, MENG Bingbing, LIN Xuan (1216)
Surrounding Rockmass Quality Classification of Tunnel Cut by TBM with Fuzzy Mathematics Method .....	.....	QI Shengwen, WU Faquan (1225)
CT Identification of Microcracks Evolution for Rock Materials .....	.....	ZHU Hongguang, XIE Heping, YI Cheng, LIU Zheng, LIU Huixin, WANG Hongtao (1230)
Preliminary Research on Scope of Rock Mass Structural Homogeneity Zone Using Stereological Interpretation .....	.....	ZHANG Guoqiang, ZHANG Ru, ZHAO Xiaoping, DENG Jianhui, FEI Wenping (1239)
Study of Deformation and Failure Model for Deep Rock Mass and Its Numerical Method .....	.....	LI Wenpei, WANG Mingyang, FAN Pengxian, DENG Hongjian (1250)
Constitutive Equation and Numerical Simulation Analysis for Broken Rock Behaviors in Compaction Test .....	.....	LEI Ming, HASHIBA Kimihiro, FUKUI Katsunori, OKUBO Seisuke (1258)
Field Test and Numerical Calculation of Restitution Coefficient of Rockfall Collision .....	.....	ZHANG Guangcheng, XIANG Xin, TANG Huiming (1266)
Study of Intrinsic Relationship between Mechanical Parameters and Parameters of Rotary Penetration Test of Soft Rock .....	.....	SONG Ling, LI Ning, LI Qian (1274)
Mechanism Study of Coal and Gas Outburst Induced by Rockburst in "Three-soft" Coal Seam .....	.....	LI Tie, MEI Tingting, LI Guoqi, XU Shouren, YANG Jianliu, DONG Hao (1283)
Study of Connectivity of Fractured Porous Media Based on Dual-percolation Model .....	.....	ZHENG Wei, LU Xiaobing, LIU Qingjie, ZHANG Xuhui (1289)