



ISSN 1000-4750

CN11-2595/O3

Ei 收录期刊

工程力学

第 37 卷 第 7 期

ENGINEERING MECHANICS

Vol. 37 No. 7



7

2020

《工程力学》杂志社
Engineering Mechanics Press

目 次

基本方法

- 线弹性断裂力学问题的扩展自然单元法 陈莘莘, 刁呈岩, 肖树聪 (001)
- 弹性模量比对界面迁移下夹杂演化的影响 井亚彬, 黄佩珍 (008)

土木工程学科

- 直立锁缝金属屋面加强抗风揭能力的优化设计 许秋华, 万 恬, 刘 凯 (017)
- 基于三维离散-连续耦合方法的 NPR 锚索-围岩相互作用机理研究.....
..... 胡 杰, 何满潮, 李兆华, 张龙飞, 冯吉利 (027)
- 梭形空间桁架约束型防屈曲支撑的性能研究 朱博莉, 郭彦林 (035)
- 内置钢板-高延性混凝土组合连梁抗震性能试验研究..... 邓明科, 张 敏, 张阳玺, 陈 森 (047)
- 轻骨料无腹筋混凝土梁剪切破坏及尺寸效应: 细观模拟 金 浏, 蒋轩昂, 杜修力 (057)
- 大气边界层大涡模拟入口湍流生成方法研究
..... 周 桐, 闫渤文, 杨庆山, PhamVan Phuc, 王京学 (068)
- 平面 SV 波入射下山体地形中双线隧道动力响应
..... 张 海, 杜雪姣, 刘中宪, 徐 颖, 杨国岗 (077)
- 剪切型消能连梁的循环屈曲特性研究 刘晓刚, 樊健生, 聂建国 (089)
- 钢管混凝土柱-双面组合作用梁框架节点抗震性能试验研究.....
..... 李 杨, 李延涛, 邢万里, 丁井臻, 宗金辉 (099)
- 基于 RVE 单元的藏式古建石砌体均质化研究 蒋宇洪, 杨 娜, 白 凡 (110)
- 矩形钢管混凝土柱-H 形钢梁外顶板式节点抗震性能试验研究..... 付 波, 王彦超, 童根树 (125)
- 并联式单向单颗粒阻尼器力学模型及优化分析 闫维明, 王宝顺, 何浩祥 (138)

目 次

基于计算接触力学的粗颗粒土体材料细观性质模拟	潘洪武, 王 伟, 张丙印 (151)
带消能连梁的矩形空心双柱式高墩抗震性能试验研究	王 源, 王天琦, 孙利民, 谢 文 (159)
考虑壁面浸润性的光滑岩体微裂隙渗流特性数值模拟研究	
..... 申林方, 李腾凤, 王志良, 李 泽, 王鹏宇 (168)	
锈蚀预应力混凝土梁承载力及破坏模式研究	邢国华, 武名阳, 常召群, 张广泰, 柳明亮 (177)
高层钢结构考虑长周期地震动的减震加固研究	杜东升, 宋宝玺, 许伟志, 王曙光 (189)
拟静力作用下群钉连接件抗剪性能研究	赵根田, 侯智译, 高 鹏, 王 达 (201)
氯离子侵蚀下 RC 框架结构时变抗震性能研究	
..... 周 炎, 郑山锁, 龙 立, 张艺欣, 贺金川, 董立国 (214)	
II 型 III 型动态裂纹尖端断裂过程区近似评估方法	姬晨濛, 戚承志 (223)
机械工程学科	
基于联络通道缓解高速列车在长大隧道的压力波波动	高 畅, 张继业, 李 田, 孙 瑶 (230)
其他工程学科	
空调塑料材料的碰撞失效模拟研究	李祖吉, 黄云艳, 刘怀灿, 耿建军, 朱耀辉, 张文超 (240)
飞机舱门橡胶密封件动摩擦性能实验研究	渠 涛, 柳 荣, 董戈锋, 柯玉超, 姚学锋 (247)

CONTENTS

METHODOLOGIES

- An extended natural element method for linear elastic fracture problems.....
CHEN Shen-shen , DIAO Cheng-yan , XIAO Shu-cong (001)
- The effect of elastic modulus ratio on inclusion evolution by interface migration
JING Ya-bin , HUANG Pei-zhen (008)

CIVIL ENGINEERING

- Optimal design of strengthening wind exposure resistance of vertical whipstitch mental roofing board.....
XU Qiu-hua , WAN Tian , LIU Kai (017)
- Numerical study on NPR cable-rock interaction using 3D discrete-continuous coupling method
HU Jie , HE Man-chao , LI Zhao-hua , ZHANG Long-fei , FENG Ji-li (027)
- Investigation on the performance of spatial-truss confined BRBS with shuttle shape longitudinally
ZHU Bo-li , GUO Yan-lin (035)
- Experimental study on seismic behavior of steel plate-high ductile concrete composite coupling beam.....
DENG Ming-ke , ZHANG Min , ZHANG Yang-xi , CHEN Sen (047)
- Shear failure and size effect of lightweight aggregate concrete beams without web reinforcement: a meso-scale study
JIN Liu , JIANG Xuan-ang , DU Xiu-li (057)
- Study of inflow turbulence generation methods with large eddy simulation for atmospheric boundary layer
 ZHOU Tong , YAN Bo-wen , YANG Qing-shan , Pham Van Phuc , WANG Jing-xue (068)
- Dynamic responses of double mountain tunnels under SV waves
ZHANG Hai , DU Xue-jiao , LIU Zhong-xian , XU Ying , YANG Guo-gang (077)
- Research on cyclic web buckling behavior of energy dissipation shear links.....
LIU Xiao-gang , FAN Jian-sheng , NIE Jian-guo (089)
- Experimental study on seismic behavior of frame joints with concrete-filled steel tubular column and double-sided composite beam
LI Yang , LI Yan-tao , XING Wan-li , DING Jing-zhen , ZONG Jin-hui (099)
- Research on the homogenization of tibetan ancient stone masonry based on RVE elements.....
JIANG Yu-hong , YANG Na , BAI Fan (110)
- Experimental study on the seismic behavior of CFST rectangular column to H-section steel beam connections with external stiffeners
FU Bo , WANG Yan-chao , TONG Gen-shu (125)
- Mechanical model and optimal analysis of parallel single-dimensional single particle damper.....
YAN Wei-ming , WANG Bao-shun , HE Hao-xiang (138)

CONTENTS

Simulation on meso-mechanical property of coarse-grained soil materials based on computational contact method	PAN Hong-wu , WANG Wei , ZHANG Bing-yin (151)
Experimental investigation on seismic performance of rectangular-hollow double-column tall piers with energy dissipation beams.....	WANG Yuan , WANG Tian-qi , SUN Li-min , XIE Wen (159)
Numerical simulation of the seepage properties of a smooth rock micro-fracture considering wall wettability	SHEN Lin-fang , LI Teng-feng , WANG Zhi-liang , LI Ze, WANG Peng-yu (168)
Load bearing capacity and failure mode of corroded prestressed concrete beams.....	XING Guo-hua , WU Ming-yang , CHANG Zhao-qun , ZHANG Guang-tai , LIU Ming-liang (177)
Seismic retrofit of a high-rise steel structure considering long-period and long-duration ground motions	DU Dong-sheng , SONG Bao-xi , XU Wei-zhi , WANG Shu-guang (189)
Study on shear performance of group stud connector under the quasi-static load	ZHAO Gen-tian , HOU Zhi-yi , GAO Peng , WANG Da (201)
Study on seismic performance of multi-age RC frame structures under chloride ion attack	ZHOU Yan , ZHENG Shan-suo , LONG Li , ZHANG Yi-xin , HE Jin-chuan , DONG Li-guo (214)
An approximate method for evaluating fracture process of the zone near mode II and mode III dynamic crack tip	JI Chen-meng , QI Cheng-zhi (223)

MECHANICAL ENGINEERING

Reducing pressure wave fluctuation of high-speed train in long tunnel based on connected aisle.....	GAO Chang , ZHANG Ji-ye , LI Tian , SUN Yao (230)
---	---

OTHER ENGINEERING DISCIPLINES

Simulation research on impact failure of plastic material for air conditioning	LI Zu-ji , HUANG Yun-yan , LIU Huai-can , GENG Jian-jun , ZHU Yao-hui , ZHANG Wen-chao (240)
Experimental study on dynamic friction performances of rubber seals for aircraft doors	QU Tao , LIU Rong , DONG Yi-feng , KE Yu-chao , YAO Xue-feng (247)