

地震工程学报

DIZHEN GONGCHENG XUEBAO

第 40 卷 第 3 期 2018 年 6 月

目次

地震工程

多龄期钢框架时变损伤模型研究	郑山锁, 张晓辉, 黄威曾, 赵旭冉, 孙乐彬 (389)
多维地震作用下大跨空间结构的减震控制分析	赵 祥, 刘忠华, 王社良, 杨 涛, 展 猛 (398)
特高压气体绝缘开关设备瓷套管抗震性能研究	 王海菠, 程永锋, 孙宇晗, 王宁华, 卢智成, 乔振宇 (406)
高层建筑在连续振动下的壁板结构失稳定 BIM 模型设计	王 娟 (413)
屈曲约束支撑钢框架结构影响因素的静力弹塑性分析	王永贵, 宋红弟 (421)
地震作用下低层建筑砌体结构的动力特性分析	雷 江 (432)
“房桥合一”铁路客站抗震计算的快速高效多维虚拟激励法	徐汉勇, 余志武 (438)
基于滞回曲线以及结构动力方程的混凝土结构抗震稳定性分析	杨建华, 彭立顺 (444)
薄壁型钢管/胶合竹板复合柱抗震性能试验	赵卫锋, 唐 凯, 龙志林 (450)
多因素复杂参数下的圆形地下水泥土桩地基场地地震效应分析	张启志 (458)
基坑桩地震冲击下的受力分析模型仿真	张富 (466)
强震状态下黄土中桩基动力性状分析	张斌伟, 严松宏 (473)
不规则性对基础隔震结构抗连续倒塌性能影响研究	包 超, 张尚荣, 马肖彤, 杜永峰, 张立新 (480)
建筑结构中抗震分析模型的优化研究	沈 毅, 郭阳照 (490)
隔震结构地震波选择方法研究	邵天聪, 白国良, 赵金全 (497)
汶川地震远震区黄土地地震反应特征分析	夏 坤, 张令心, 董 林 (504)
寒区黏土与结构接触面冻结强度特性试验研究	陈 拓, 赵光思, 赵 涛 (512)

地震科学研究与观测

用震中迁移交会讨论 1668 年郯城 8½ 级地震——纪念郯城大震 350 周年	郭增建, 郭安宁 (519)
海南岛及近海波速比特征初步研究	张 慧, 李志雄, 李 盛 (524)
基于一种新智能优化算法与谱相关方法对重力固体潮的分析	高 略, 全海燕 (535)
地震活动的随机场特征	马禾青, 杨明芝 (542)
地震波动强度变化的数学建模分析与仿真	柴瑞帅 (549)
基于阿里亚斯烈度估值的概率性地震危险性分析——以四川丹棱县及其周缘为例	 李雪婧, 吴 健, 高孟潭, 徐伟进 (555)
利用 GPS 数据研究南北地震带北段近期地壳水平形变特征	张 楠, 许文俊 (562)
基于云计算的地震预警网络系统的设计与实现	陈新房, 刘庆杰, 王金峰 (574)

其他

孤立山体地震动力响应的振动台试验研究..... 肖文静，廖佳名，张亮亮（582）

近距离上层隧道施工对下层隧道的扰动影响 唐强森，刘 涛（591）

地震区域的电力自动调度应急模型设计 侯宏生，赵 猛，刘 怡，郑 阳，李俊杰（597）

基于大数据的地震多发区域破坏程度估计模型设计 成桂兰（604）

圆钢管约束高强灌浆料局部承压性能研究 张啸驰，陈建伟，闫文赏，郑玲玲（612）

强震下的细木工板建筑材料承压特征分析 梁 美（619）

CHINA EARTHQUAKE ENGINEERING JOURNAL

Vol.40 No.3 June, 2018

CONTENTS

Study on Time-varying Damage Model of Multi-age Steel Frame Structures	
..... ZHENG Shansuo, ZHANG Xiaohui, HUANG Weizeng, ZHAO Xuran, SUN Lebin (389)	
Seismic Control Analysis of Large-span Space Structures under Multidimensional Earthquakes	
..... ZHAO Xiang, LIU Zhonghua, WANG Sheliang, YANG Tao, ZHAN Meng (398)	
Seismic Performance of Ultra High Voltage Gas Insulated Switchgear Porcelain Bushing	
..... WANG Haibo, CHENG Yongfeng, SUN Yuhan, WANG Ninghua, LU Zhicheng, QIAO Zhenyu (406)	
Panel Structure Instability BIM Model Design of High-rise Buildings under Continuous Vibration	
..... WANG Juan (413)	
Static Elastoplastic Analysis (Pushover Analysis) of the Factors Influencing Buckling-restrained Braced Steel Frame Structures	
..... WANG Yonggui, SONG Hongdi (421)	
Dynamic Characteristics of Masonry Structure of Low-rise Buildings under Earthquakes	
..... LEI Jiang (432)	
Fast and Efficient Multi-Dimensional Pseudo-Excitation Method for Seismic Calculation of " Building-Bridge Integration " Railway Station	
..... XU Hanyong, YU Zhiwu (438)	
Seismic Stability Analysis of Concrete Structures Based on Hysteretic Curves and Structural Dynamic Equations	
..... YANG Jianhua, PENG Lishun (444)	
Experiments on the Seismic Behavior of Thin-Walled Steel Tube/Bamboo Plywood Composite Columns	
..... ZHAO Weifeng, TANG Kai, LONG Zhiling (450)	
Seismic Site Effect of Circular Underground Cement — Soil Pile Foundation Considering Multi-factor and Complex Parameters	
..... ZHANG Qizhi (458)	
Simulation of Force Analysis Model for Foundation Pit Pile under Seismic Impact	
..... ZHANG Fu (466)	
Dynamic Performance of Pile Foundation in Loess During Strong Earthquakes	
..... ZHANG Binwei, YAN Songhong (473)	
Effect of Irregularity on the Progressive Collapse Resistance of Base-isolated Structures	
..... BAO Chao, ZHANG Shangrong, MA Xiaotong, DU Yongfeng, ZHANG Lixin (480)	
Optimization Research on a Seismic Analysis Model of Building Structures	
..... SHEN Yi, GUO Yangzhao (490)	
Discussion of Seismic Waves Selection Method for Isolation Structures	
..... SHAO Tiancong, BAI Guoliang, ZHAO Jingquan (497)	
Earthquake Response Analysis for Loess Sites in Far-Field of Wenchuan Earthquake	
..... XIA Kun, ZHANG Lingxin, DONG Lin (504)	
Experimental Study on the Freezing Strength Characteristics of Clay-Structure Interface in Cold Regions	
..... CHEN Tuo, ZHAO Guangsi, ZHAO Tao (512)	
Discussion on the Tancheng M8½ Earthquake of 1668 Based on the Intersection of Epicenter Migration : For the 350 th Anniversary of Tancheng Earthquake	
..... GUO Zengjian, GUO Anning (519)	
Preliminary Study on the Wave Velocity Ratio (v_p/v_s) in Hainan Island and Offshore Areas	
..... ZHANG Hui, LI Zhixiong, LI Sheng (524)	
Analysis of Gravity Earth Tide Using a New Intelligent Optimization Algorithm and Spectral Correlation Method	

.....	GAO Lue , QUAN Haiyan	(535)
Random Field Features of Seismic Activity	MA Heqing , YANG Mingzhi	(542)
Mathematical Modeling Analysis and Simulation of Variations in Seismic Wave Intensity	CHAI Ruishuai	(549)
Probabilistic Seismic Hazard Analysis Based on Arias Intensity ; A Case Study in Danling County , Sichuan Province and Its Surrounding Area	LI Xuejing , WU Jian , GAO Mengtan , XU Weijin	(555)
Study of the Recent Crustal Horizontal Deformation in the Northern Segment of the North — South Seismic Belt Based on GPS Data	ZHANG Nan ,WANG Jin ,XU Wen-jun	(562)
Design and Implementation of an Earthquake Early Warning Network System Based on Cloud Computing		
.....	CHEN Xinfang , LIU Qingjie , WANG Jinfeng	(574)
Shaking Table Test on Seismic Dynamic Responses of Isolated Mountains		
.....	XIAO Wenjing , LIAO Jiaming , ZHANG Liangliagn	(582)
Influence of Construction Disturbance from Close Upper Tunnel on Lower Tunnel	TANG Qiangsen , LIU Tao	(591)
Emergency Model Design for Automatic Dispatching of Electric Power in Seismic Areas		
.....	HOU Hongsheng , ZHAO Meng , LIU Yi , ZHENG Yang , LI Junjie	(597)
Design of a Damage Degree Estimation Model in Earthquake-prone Areas Based on Big Data	CHENG Guilan	(604)
Local Compressional Behavior of Circular Tubed High Strength Grouting Material		
.....	ZHANG Xiaochi , CHEN Jianwei , YAN Wenshang , ZHENG Lingling	(612)
Pressure-bearing Characteristics of Blockboard Building Materials under Strong Earthquakes	LIANG Mei	(619)