

地震工程学报

DIZHEN GONGCHENG XUEBAO

第 42 卷 第 6 期 2020 年 11 月

目次

结构

- 地下结构震害预测研究综述 刘如山, 朱 治 (1349)
- 建筑抗震实时混合试验时滞补偿方法研究综述 刘洪波, 刘 洁 (1361)
- 基于不同参数的基础隔震结构非线性概率密度演化 孙 臻, 刘伟庆 (1369)
- 某新型梁柱节点的装配式钢筋混凝土框架结构基于性能的抗震设计研究
..... 李 进, 张娇磊, 李书锋, 袁大伟, 张淑齐, 张金城 (1377)
- 基于性能的钢筋混凝土框架剪力墙结构地震易损性分析 马肖彤, 陆 华, 何妍亭, 马 艳 (1386)
- 斜交连续刚构桥桥墩地震易损性分析 张 智, 李小军, 兰日清, 宋辰宁 (1391)
- 钢筋混凝土桥梁地震易损性评估模型设计 高菁阳 (1402)
- 比例阻尼矩阵构建方法对高重力坝地震反应的影响 殷 琳, 楼梦麟, 康 帅 (1409)
- 正常工况下大型岸桥地震瑞利阻尼系数计算方法及试验研究 李 哲, 伍世英 (1417)
- 基于地震易损性分析的平塘特大桥关键构件破坏顺序研究
..... 徐向东, 魏 标, 梁天贵, 杜 镔, 胡章亮 (1427)
- 附设黏滞阻尼器的传统风格建筑混凝土梁-柱节点动力循环荷载累积损伤分析
..... 董金爽, 隋 龔, 薛建阳 (1437)
- 汽机弹簧隔振基础地震反应及弹簧变形分析 安 栋 (1444)

地震科学

- 1920 年海原 8.5 级地震发生日期的异年倍九律现象 郭增建, 郭安宁 (1451)
- 据地壳介质非均匀性判断郯庐断裂带鲁苏段未来大震位置
..... 李清河, 熊 振, 黄 耘, 范小平, 刘希强, 张元生, 鲍海英 (1454)
- 基于北斗卫星通信的地震应急指挥系统研究 陈晓琳, 李盛乐, 刘 坚, 刘珠妹 (1465)
- 四川宜宾 6.0 级地震对北斗地基增强基准站稳定性的短期影响 贾逸君, 成 芳, 沈鹏礼 (1473)
- 土壤氡对郯庐断裂宿迁段 F₅ 断裂探测和活动性的研究
..... 戴 波, 赵启光, 张 敏, 张 扬, 冯 武 (1479)
- 昌平—丰南断裂构造浅层地震勘探新证据 彭远黔, 高武平, 冉志杰, 朱坤静 (1487)
- 龙门山大川—双石断裂在都江堰隐伏段的综合探测研究
..... 黎厚富, 王世元, 周亚东, 赵德军, 刘 韶, 梁明剑 (1497)
- 基于数据跟踪分析的新疆区域电磁仪器环境干扰特征分析 雷 晴, 颜 龙, 史勇军 (1507)
- 电磁卫星地面对比观测原型系统地电场观测资料特征分析
..... 周卫东, 牛延平, 田 野, 苏小芸, 陈丽君 (1517)
- 基于改进蚁群算法在面波频散曲线反演中的应用 王天琦, 于东凯, 蔡 润 (1523)
- 乳山震群震源区地壳速度结构初步研究 李翠芹, 郑建常, 沈旭章, 李 媛, 戴宗辉 (1534)

利用剪切波分裂研究青藏高原东北缘及东南缘上地幔各向异性 卫志杰, 张盛中, 杨晓瑜, 李世鑫, 王晨辰, 童 琼 (1540)

地震台站噪声水平定量评估及其在气枪源探测中的应用 林彬华, 金 星, 黄玲珠, 李 军, 张燕明 (1555)

2014 年云南景谷 6.6 级地震序列震源参数研究 周少辉, 蒋海昆, 曲均浩, 郑旭, 郭宗斌, 李亚军, 张志慧 (1565)

云南测震台有线信道与无线信道互为备份传输方案设计 曹舸斌, 起卫罗, 党文杰, 程旭东, 李文涛 (1573)

土力学与土动力学

均质介质中排桩对瑞利波的阻隔试验分析 刘晶磊, 刘 航, 薛晓峰, 刘 杰 (1579)

基于桩间土滑动特性的合理桩间距研究 任永忠, 朱彦鹏 (1590)

土遗址土动力特性 王 平, 王会娟, 王丽丽, 柴少峰 (1598)

结构性参数在黄土地基沉降计算中的应用研究 陶 虎, 邵生俊, 王正泓, 张少英, 石 喜 (1604)

地震黄土滑坡滑距预测的 BP 神经网络模型 常晁瑜, 薄景山, 李孝波, 乔 峰, 闫东晗 (1609)

盾构隧道的液化危害性分析 邵 帅, 邵生俊, 郑芸昕 (1615)

三轴拉伸试验下 K₀ 固结饱和黏土的动剪切模量和阻尼比 贺张悦, 王建华, 郭 鹏 (1623)

太山龙泉寺舍利塔边坡地震稳定性研究 丁学文, 李国珍, 丁志平, 李 申, 冯凯宇 (1632)

山西大宁县典型滑坡体地貌特征与降雨和强震关系 赵振明, 唐亚明, 徐 永, 薛 强 (1641)

贵阳地区红黏土动力参数计算模型研究 龙安发, 陈开圣, 张安轮 (1650)

重复循环荷载作用下原状黄土动力特性试验研究 文少杰, 张吾渝, 王 鹏 (1659)

基于相似分析的不同围压-温度的混凝土抗压强度研究 郑海忠, 严武建, 石玉成, 卢育霞, 王 平, 李福秀 (1666)

地震诱发石碑塬黄土地层液化滑移距离研究 马星宇, 王兰民, 钟秀梅, 蒲小武, 刘富强, 王 谦 (1674)

震灾防御

新一代区域地震灾害快速评估系统设计与实现——以甘肃省为例 陈文凯, 周中红, 张 灿, 孙艳萍, 张苏平, 马小平 (1683)

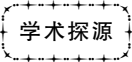
地震次生火灾研究进展 张立新 (1693)

2018 年陕西宁强 5.3 级地震强地面运动特征及局部场地效应分析 王文才, 尹志文, 苏小芸, 江志杰 (1700)

基于 NGA 模型的芦山余震地震动衰减关系 党鹏飞, 刘启方 (1706)

ADS 项目场地稳定性评价中高密度电阻率法的综合应用 刘柏宇, 赵乘程 (1715)

基于 GIS 的白龙江流域舟曲—武都段的滑坡危险性评价 刘 杰, 武 震 (1723)



灾害链学术思想的提出及两个概念概述 李健梅, 贾源源, 段博儒 (1735)

简讯报道

简讯 1920 年海原地震破裂带甘肃景泰三塘村段得以保护 (1472)

简讯 甘肃景泰锁军堡 1920 年海原地震遗址得以保护 (1486)

简讯 兰州地震研究所部分学生向母校敬赠郭增建先生铜像 (1735)

报道 本刊参加由中国地球物理学会宣传出版工作委员会组织的 2020 年中国地球科学联合学术年会期刊展 (1496)

CHINA EARTHQUAKE ENGINEERING JOURNAL

Vol.42 No.6 November, 2020

CONTENTS

Review of Earthquake Damage Prediction for Underground Structures	LIU Rushan, ZHU Zhi (1349)
Review of Delay Compensation Methods for Real-time Hybrid Testing of Earthquake-resistance of Buildings	LIU Hongbo, LIU Jie (1361)
Analysis of Probability-Density Evolution of Nonlinear Response of Base-isolated Structures Based on Different Parameters	SUN Zhen, LIU Weiqing (1369)
Performance-based Seismic Design of Fabricated Reinforced-Concrete-Frame Structures with New Beam—Column Joints	LI Jin, ZHANG Jiaolei, LI Shufeng, YUAN Darwei, ZHANG Shuqi, ZHANG Jincheng (1377)
Performance-based Seismic Fragility Analysis of a Reinforced-concrete Frame-Shear Wall Structure	MA Xiaotong, LU Hua, HE Yanting, MA Yan (1386)
Seismic Fragility Analysis of the Piers of a Skewed Continuous Rigid-frame Bridge	ZHANG Zhi, LI Xiaojun, LAN Riqing, SONG Chenning (1391)
Design of a Seismic Vulnerability Assessment Model for Reinforced Concrete Bridges	GAO Jingyang (1402)
Influence of Construction Method with Proportional Damping Matrix on Seismic Response of High-gravity Dams	YIN Lin, LOU Menglin, KANG Shuai (1409)
Calculation Method and Experimental Study of Rayleigh Damping Coefficients of Quayside Container Cranes in Normal Conditions	LI Zhe, WU Shiyong (1417)
Failure Sequence of Key Components of Pingtang Major Bridge Based on Seismic Vulnerability Analysis	XU Xiangdong, WEI Biao, LIANG Tianguai, DU Bin, HU Zhangliang (1427)
Cumulative Damage Analysis of Beam-Column Joints in Traditional-Style Buildings with Viscous Damper under Dynamic Cyclic Loading	DONG Jinshuang, SUI Yan, XUE Jianyang (1437)
Seismic Response of Spring Vibration-isolated Foundation for Turbo-generators and Associated Spring Deformation Analysis	AN Dong (1444)
Discussion on the Occurrence Date of the 1920 M_s 8.5 Haiyuan Earthquake Using the Rhythm of Multiplied Nine Days in Different Years Method	GUO Zengjian, GUO Anning (1451)
Location of Future Large Earthquakes in Jiangsu—Shandong Segment of the Tanlu Fault Zone from Crustal Media Inhomogeneity	LI Qinghe, XIONG Zhen, HUANG Yun, FAN Xiaoping, LIU Xiqiang, ZHANG Yuansheng, BAO Haiying (1454)
An Earthquake Emergency Command System Based on BeiDou Satellite Communication	CHEN Xiaolin, LI Shengle, LIU Jian, LIU Zhumei (1465)
Short-term Influence of $M6.0$ Earthquake in Yibin, Sichuan, on the Stability of Base Stations for BeiDou Ground-based Augmentation System	JIA Yijun, CHENG Fang, SHEN Pengli (1473)
Detection and Activity of the Fault F_5 in Suqian Segment of the Tanlu Fault by Using Soil Radon	DAI Bo, ZHAO Qiguang, ZHANG Min, ZHANG Yang, FENG Wu (1479)
New Evidences of the Changping—Fengnan Fault Discovered by Shallow Seismic Exploration Method	PENG Yuanqian, GAO Wuping, RAN Zhijie, ZHU Kunjing (1487)
Comprehensive Survey and Study on the Buried Segment of the Dachuan—Shuangshi Fault in the Dujiangyan Area	LI Houfu, WANG Shiyuan, ZHOU Yadong, ZHAO Dejun, LIU Shao, LIANG Mingjian (1497)
Environmental Interference Characteristics of Electromagnetic Instruments in Xinjiang Area Based on Data Tracking Analysis	LEI Qing, YAN Long, SHI Yongjun (1507)
Characteristics of Geoelectric Field Data from a Ground-based Comparative Observation System of Electromagnetic Satellites	ZHOU Weidong, NIU Yanping, TIAN Ye, SU Xiaoyun, CHEN Lijun (1517)
Application of the Improved Ant Colony Algorithm in the Inversion of Rayleigh Wave Dispersion Curves	WANG Tianqi, YU Dongkai, CAI Run (1523)

Preliminary Study of Crustal Velocity Structure in the Focal Region of the Rushan Earthquake Swarm	1534
..... LI Cuiqin, ZHENG Jianchang, SHEN Xuzhang, LI Yuan, DAI Zonghui	
Upper Mantle Anisotropy Beneath the Northeastern and Southeastern Margins of the Tibetan Plateau from Shear Wave Splitting ...	1540
..... WEI Zhijie, ZHANG Shengzhong, YANG Xiaoyu, LI Shixin, WANG Chenchen, TONG Qiong	
Quantitative Assessment of Background Noise Levels of Seismic Stations and Their Application in Air-Gun Source Detection	1555
..... LIN Binhua, JIN Xing, HUANG Lingzhu, LI Jun, ZHANG Yanming	
Source Parameters of the 2014 M6.6 Earthquake Sequence in Jinggu, Yunnan	1565
..... ZHOU Shaohui, JIANG Haikun, QU Junhao, ZHENG Xu, GUO Zongbin	
Backup Scheme of Wired and Wireless Channels for Yunnan Seismological Stations	1573
..... CAO Gebin, QI Weiluo, DANG Wenjie, CHENG Xudong, LI Wentao	
Test on the Dilution Effect on the Rayleigh Wave of Row Piles in Homogeneous Medium	1579
..... LIU Jinglei, LIU Hang, XUE Xiaofeng, LIU Jie	
Rational Spacing between Anti-slide Piles Based on Sliding Characteristic of Soil between Piles	1590
..... REN Yongzhong, ZHU Yanpeng	
Dynamic Characteristics of Undisturbed and Remolded Earthen-site Soil in Hexi Area	1598
..... WANG Ping, WANG Huijuan, WANG Lili, CHAI Shaofeng	
Application of Structural Parameters in Calculation of Loess Foundation Settlement	1604
..... TAO Hu, SHAO Shengjun, WANG Zhenhong, ZHANG Shaoying, SHI Xi	
A BP Neural Network Model for Forecasting Sliding Distance of Seismic Loess Landslides	1609
..... CHANG Chaoyu, BO Jingshan, LI Xiaobo, QIAO Feng, YAN Donghan	
Analysis of Liquefaction Hazard in Shield Tunnels	1615
..... SHAO Shuai, SHAO Shengjun, ZHENG Yunxin	
Dynamic Shear Modulus and Damping Ratio of K_0 -Consolidated Saturated Clay in Cyclic Triaxial Tensile Tests	1623
..... HE Zhangyue, WANG Jianhua, GUO Peng	
Seismic Slope Stability of the Dagoba of Longquan Temple in Taishan, Taiyuan City	1632
..... DING Xuewen, LI Guozhen, DING Zhiping, LI Shen, FENG Kaiyu	
Geomorphic Characteristics of Typical Landslides in Daning County, Shanxi Province, China, and Its Relationship with Rainfall and Strong Earthquakes	1641
..... ZHAO Zhenming, TANG Yaming, XU Yong, XUE Qiang	
A Calculation Model of Red Clay Dynamic Parameters in the Guiyang Area	1650
..... LONG Anfa, CHEN Kaisheng, ZHANG Anlun	
Experimental Study on Dynamic Characteristics of Intact Loess under Repeated Cyclic Loading	1659
..... WEN Shaojie, ZHANG Wuyu, WANG Peng	
Compressive Strength of Concrete under Different Confining Pressures and Temperatures Based on Similarity Analysis	1666
..... ZHENG Haizhong, YAN Wujian, SHI Yucheng, LU Yuxia, WANG Ping, LI Fuxiu	
Slippage Distance of Loess Deposit Triggered by Earthquake-induced Liquefaction in Shibeiyuan Area	1674
..... MA Xingyu, WANG Lanmin, ZHONG Xiumei, PU Xiaowu, LIU Fuqiang, WANG Qian	
Design and Implementation of a Rapid Assessment System for Regional Earthquake Disasters in Gansu Province	1683
..... CHEN Wenkai, ZHOU Zhonghong, ZHANG Can, SUN Yanping, ZHANG Suping, MA Xiaoping	
Advances in Research on Post-earthquake Fires	1693
..... ZHANG Lixin	
Characteristics of Strong Ground Motion of the 2018 Ningqiang M5.3 Earthquake in Shaanxi Province and Local Site Response Analysis	1700
..... WANG Wencai, YIN Zhiwen, SU Xiaoyun, JIANG Zhijie	
Ground Motion Attenuation Relationship of Lushan Aftershocks Based on NGA Model	1706
..... DANG Pengfei, LIU Qifang	
Application of High-density Resistivity Method in Evaluation of Stability of ADS Facility Site	1715
..... LIU Baiyu, ZHAO Chengcheng	
Landslide Risk Assessment of the Zhouqu—Wudu Section of Bailong River Basin Based on Geographic Information System	1723
..... LIU Jie, WU Zhen	
Proposal of the Disaster Chain Theory and Its Two Concepts	1735
..... LI Jianmei, JIA Yuanyuan, DUAN Boru	