

# 地震工程学报

DIZHEN GONGCHENG XUEBAO

第 40 卷 第 2 期 2018 年 4 月

## 目 次

### 地震工程

复合外套型特高压交流 CVT 抗震与减震试验研究	程永锋, 刘振林, 汤华, 卢智成, 马跃, 邱宁, 朱祝兵 (191)
多龄期钢框架结构地震损伤模型研究	王晓飞, 贾虎, 王鹏飞, 程洋, 罗强 (198)
大跨度钢管混凝土拱桥非线性抗震性能研究	杜謇, 夏修身, 孙学先 (206)
强震环境下带钢避难建筑抗震模型设计	王培先, 王超, 彭立顺 (213)
远场长周期地震下基于规范设计隔震结构的抗震性能研究	王亚楠, 杜永峰, 胡高兴, 刘星 (219)
一种改进后的海上风机动力特性理论分析方法研究	余璐庆, 吕学金, 汤旅军, 黄玉佩 (225)
时变地震谱估计的非参数方法评价及应用	苏延文, 黄国庆 (233)
随机振动下大跨度钢管混凝土柱结构抗震性能测试方法	付建 (241)
近断层脉冲型地震下建筑地桩基础沉降分析	李琦, 李瑞 (246)
基坑排桩对建筑抗震性的影响分析	侯文萃, 陈能远, 高洁 (252)
某桥梁桩基础的抗震计算研究	贾鹏, 王兰民, 万征, 秋仁东, 刘金波 (258)
采用板式橡胶支座的连续斜梁桥横向抗震行为研究	姚凯, 徐略勤, 李建中, 龚恋 (265)
多点激励下大跨度连续钢桁架柔性拱桥空间地震响应分析	施成, 蔺鹏臻, 周朋, 何志刚 (273)

### 地震科学研究与观测

南海岛礁场地地震稳定性研究中的关键问题探讨	胡进军, 徐长琦, 谢礼立, 李琼林 (279)
陕西地区小微震震源机制研究	惠少兴, 严川, 王平, 金昭娣 (288)
新疆地区一维地壳速度模型研究	陈向军, 上官文明, 宋秀青 (294)
陕西咸阳东地震砂土液化的发现及意义	王师迪, 师亚芹, 李高阳 (305)
2016 年 8 月 24 日意大利中部 $M_w 6.2$ 地震强地面运动特征分析	冯继威, 李山有, 宋晋东 (316)
河北省流动地磁观测异常特征分析	崔泽岩, 张肖, 王慧, 刘静, 李金, 苏树朋 (329)

### 震灾机理与应急

SH 波在地裂缝界面处的传播规律	王雷, 王瑞胡志平, 柴少波, 王启耀 (335)
强烈震动对山区岩石属性参数变化的影响分析	肖丽丽 (344)
地震灾后区域无人机 GPS 遥感定位技术研究	时盛春 (350)
基于大数据的地震损失价值评估模型设计	张加庆 (356)
地震应急测绘信息智能综合处理技术研究	曾瑞, 王英彦, 张炜超 (363)

### 其他

海洋工程中桩基抗拔承载力研究	郭欣玥, 刘润 (369)
基于能量最小化原理的弹性波 CT 成像频域有限元反演算法	薛龙, 刘天云, 张建民 (376)
岩石损伤模量分析	李博, 肖威, 王华伟 (384)
“全国第五届防灾减灾之路研讨会”简讯	(368)

# CHINA EARTHQUAKE ENGINEERING JOURNAL

Vol.40 No.2 April, 2018

## CONTENTS

Experimental Study on the Seismic Performance of Polymeric-Housed UHVAC Capacitor Voltage Transformers .....	CHENG Yongfeng, LIU Zhenlin, TANG Hua, LU Zhicheng, MA Yue, QIU Ning, ZHU Zhubing (191)
Seismic Damage Model of a Multi-age Steel Frame Structure .....	WANG Xiaofei, JIA Hu, WANG Pengfei, CHENG Yang, LUO Qiang (198)
Nonlinear Seismic Behavior of Long-span Concrete-filled Steel Tubular Arch Bridges .....	DU Qian, XIA Xiushen, SUN Xuexian (206)
Aseismic Model Design of Steel Strip Refuge Buildings Under Strong Earthquakes .....	WANG Peixian, WANG Chao, PENG Lishun (213)
Seismic Performance of Base-Isolated Structures Under Far-field Long-period Ground Motion Based on Seismic Codes .....	WANG Yanan, DU Yongfeng, HU Gaoxing, LIU Xing (219)
An Improved Theoretical Analysis Method for the Dynamic Characteristics of Offshore Wind Turbines .....	YU Luqing, LÜ Xuejin, TANG Lüjun, HUANG Yupei (225)
Evaluation and Application of Non-parametric Approach for Time-varying Seismic Spectral Estimation .....	SU Yanwen, HUANG Guoqing (233)
Research on Seismic Performance Testing Method of Long-span Concrete-filled Steel Tubular Columns Under Random Vibrations .....	FU Jian (241)
Settlement Analysis of Building Pile Foundation Under Near-fault Pulse-like Ground Motions .....	LI Qi, LI Rui (246)
Influence of Foundation Pit Pile Rows on the Seismic Performance of Buildings .....	HOU Wencui, CHEN Nengyuan, GAO Jie (252)
Seismic Calculation and Analysis of the Pile Foundation of a Certain Bridge .....	JIA Peng, WANG Lanmin, WAN Zheng, QIU Rendong, LIU Jinbo (258)
Transverse Seismic Behavior of Continuous Skewed Girder Bridges with Elastomeric Pad Bearings .....	YAO Kai, XU Lueqin, LI Jianzhong, GONG Lian (265)
Spatial Seismic Response Analysis of Long-span Continuous Steel Truss Flexible Arch Bridge Under Multi-Support Excitations .....	SHI Cheng, LIN Pengzhen, ZHOU Peng, HE Zhigang (273)
Key Issues in Seismic Stability Analysis of Reef Sites in South China Sea .....	HU Jinjun, XU Changqi, XIE Lili, LI Qionglin (279)
Research on Focal Mechanisms of the Small and Micro Earthquakes in Shaanxi Area .....	HUI Shaoxing, YAN Chuan, WANG Ping, JIN Zhaodi (288)
Study on One Dimensional Crustal Velocity Model of Xinjiang Area .....	CHEN Xiangjun, SHANGGUAN Wenming, SONG Xiuqing (294)
Discovery and Implications of Sand Liquefaction in Eastern Xianyang, Shaanxi Province .....	WANG Shidi, SHI Yaqin, LI Gaoyang (305)
Characteristics of Strong Ground Motion Recorded During the August 24, 2016, Italy $M_w 6.2$ Earthquake .....	FENG Jiwei, LI Shanyou, SONG Jindong (316)
Anomaly Characteristics of Mobile Geomagnetic Observation in Hebei Province .....	CUI Zeyan, ZHANG Xiao, WANG Hui, LIU Jing, LI Jin, SU Shupeng (329)
Propagation Law of SH-wave Across Ground Fissure Interface .....	WANG Lei, WANG Rui, HU Zhiping, CHAI Shaobo, WANG Qiya (335)
Influence of Strong Motion on the Attribute Parameters Variation of Rocks in Mountainous Areas .....	XIAO Lili (344)
GPS Remote Sensing Positioning Technology for Unmanned Aerial Vehicle in Post-earthquake Area .....	SHI Shengchun (350)
Design of Earthquake Loss Value Evaluation Model Based on Big Data .....	ZHANG Jiaqing (356)
Intelligent Comprehensive Processing Technology of Earthquake Emergency Surveying and Mapping Information .....	ZENG Rui, WANG Yingyan, ZHANG Weichao (363)
Study of the Uplift Bearing Capacity of Pile Foundations in Ocean Engineering .....	GUO Xinyue, LIU Run (369)
FEM Inversion Algorithm in Frequency Domain for Elastic Wave CT Based on Energy Minimization Principles .....	XUE Long, LIU Tianyun, ZHANG Jianmin (376)
Analysis of Damage Modulus of Rock .....	LI Bo, XIAO Wei, WANG Huawei (384)