

<http://www.jrse.cn>

ISSN 1672-7029

CN43-1423/U

铁道科学与工程学报

铁道科学与工程学报

Journal of Railway Science and Engineering

December 2018

Volume 15 Number 12



中南大学
中国铁道学会 主办

铁道科学与工程学报

2018年12月

第15卷第12期

总第105期

目 次

高速铁路技术

- 面向运行稳定性的高速轨道车辆悬挂参数多目标稳健优化.....王攀攀,杨岳,易兵,刘文龙,王婷(3021)
基于时间历程的高速铁路轨道不平顺异常值处理算法.....汪鑫,高天赐,方嘉晟,王平(3029)
CRTS I型板式轨道快速注浆抬升方案研究.....陈醉,杨荣山,汪杰(3037)
动车组重联网络控制系统时延预测及补偿.....刘洋,李常贤,陈龙(3044)
CRTS II型板式无砟轨道路桥过渡段动力响应研究.....周文涛,涂鹏,陈宪麦(3050)
高天隧道水害所致双块式无砟轨道受力特性分析.....欧阳旋宇(3060)

轨道与基础

- 桥隧过渡段实腹式RC拱桥上无缝线路纵向力分布特征.....于向东,李毓坤,闫斌(3066)
基于泊松-威布尔过程的钢轨修理周期预测研究.....白文飞,张伟,刘仍奎,王福田,孙全欣(3073)
疲劳裂纹扩展引起的钢轨表面剥离研究.....昝晓东,李孝滔,邢帅兵,张言库,江晓禹(3082)
基于非线性Mohr-Coulomb准则的刚性条形基础下伏孔洞承载特性变分分析
.....李亮,石鹤扬,曾中林,胡世红(3089)
上覆土嵌岩桩抗拔受力性状离心模型试验研究.....王钦科,马建林,褚晶磊,孙珍茂(3097)
铁路桥梁浅基础设计变量的不确定性分析.....张威振(3106)
城市生活垃圾土的大型水平剪切试验研究.....贺建清,胡伟,廖湘华,王永华,高文华(3113)
重载铁路路基状态监测与评价分析研究.....唐永康(3120)

桥梁隧道与结构

- 近断层脉冲方向性对大跨斜拉桥地震响应的影响.....陈志强,郑史雄,陈志伟,洪成晶,李晰(3127)

混凝土桥梁中氯离子传输的元胞自动机模型.....	马俊军, 蔺鹏臻(3135)
扣件刚度对车辆-轨道-桥梁耦合系统频率响应的影响.....	张燕, 卢沛君(3141)
基于有限元网格尺寸效应影响的峰值应变修正研究.....	彭容新, 陈爱军, 贺国京, 王解军(3148)
大翼缘宽箱梁矮塔斜拉桥施工阶段剪力滞效应分析.....	陈千书, 黄文龙, 杨孟刚(3158)
斜拉桥钢箱梁考虑疲劳性能的纵隔板设计参数研究.....	欧阳洋, 祝志文, 蔡晶垚(3165)
考虑 Hoek-Brown 准则和孔压效应隧道掌子面可靠度分析.....	张佳华, 王卫军, 张道兵, 马宗宇(3173)
类矩形盾构隧道横向刚度有效率分析.....	丁祖德, 付江, 王志良, 郭永发, 李向红(3181)
强透水砂卵地层深基坑地下水控制方案比选与优化设计.....	刘胜利, 蒋盛钢, 曹成勇(3189)
崤山隧道异常水平变形段支护结构优化探讨.....	王军(3198)
大跨平坡屋盖风荷载折减的移动平均法.....	祝志文, 程国用(3208)
基于有限测试数据的结构响应不确定性量化分析.....	骆勇鹏, 黄方林, 刘景良, 鲁四平, 许旭堂(3217)

机车车辆与设备

轨道梁动力行为对跨座式单轨车辆走行性能的影响.....	李小珍, 葛廷龙, 晋智斌, 朱艳(3225)
基于功率流的弹性分开式扣件垂向刚度匹配.....	汪力, 肖杰灵, 王强, 王平, 王冠(3232)
基于绿色施工的铁路填土路堤施工机群配置.....	郑雨茜, 鲍学英(3239)
钢轨表面缺陷检测系统中图像增强预处理方法研究.....	岳彪, 闵永智, 马宏峰, 肖本郁(3248)
基于 GA-BP 神经网络的列控车载设备故障诊断方法研究.....	周璐婕, 董昱(3257)

运输·物流·工程管理

基于熵权和灰色聚类模型的城市轨道交通外部效应研究.....	刘清漪, 蒋琦玮, 王梦缘(3266)
改进粒子群算法优化 LSTM 神经网络的铁路客运量预测.....	李万, 冯芬玲, 蒋琦玮(3274)
基于二元决策图的中欧班列运营风险评估.....	冯芬玲, 牛天聪(3281)
城市轨道交通服务质量监管评价研究.....	陈维亚, 晏秀娟, 潘晖, 邓李媛, 文邦彦(3288)
《铁道科学与工程学报》2018年第15卷(1~12期)总目次.....	(I)

全卷终

责任编辑：阳丽霞 涂鹏 英文编审：杨小礼 封面设计：刘谊

期刊基本参数：CN43-1423/U*2004*m*A4*274*zh*P*¥20.00*1500*35*2018-12

Journal of Railway Science and Engineering

Volume 15 Number 12

(Sum 105)

December 2018

CONTENTS

High-speed Rail Technology

- Multi-objective robust optimization of suspension parameters for high-speed rail vehicle
.....WANG Panpan, YANG Yue, YI Bing, LIU Wenlong, WANG Ting(3021)
- Time-history based processing algorithm for abnormal data from track geometry irregularity in high-speed railway
.....WANG Xin, GAO Tianci, FANG Jiasheng, WANG Ping(3029)
- Rapid lifting plans of grouting for CRTS I slab track.....CHEN Zui, YANG Rongshan, WANG Jie(3037)
- Time-delay prediction and compensation of EMU coupling network control system.....LIU Yang, LI Changxian, CHEN Long(3044)
- Study on dynamic response of CRTSII slab track of bridge-subgrade transition section
.....ZHOU Wentao, TU Peng, CHEN Xianmai(3050)
- Study on mechanical characteristics of double block ballastless track in Gaotian tunnel due to water disaster
.....OUYANG Xuanyu(3060)

Track and Foundation

- Continuously welded rail track longitudinal forces distribution characteristics of solid web reinforced concrete arch bridge
of bridge-tunnel connection section.....YU Xiangdong, LI Yukun, YAN Bin(3066)
- Research on prediction for rail maintenance period based on Poisson-Weibull process
.....BAI Wenfei, ZHANG Wei, LIU Rengkui, WANG Futian, SUN Quanxin(3073)
- Analysis of rail surface shelling resulting from fatigue crack propagation
.....ZAN Xiaodong, LI Xiaotao, XING Shuaibing, ZHANG Yanku, JIANG Xiaoyu(3082)
- Variational analysis of bearing characteristics of the cavity under the rigid strip foundation based on the nonlinear
Mohr-Coulomb failure criterion.....LI Liang, SHI Heyang, ZENG Zhonglin, HU Shihong(3089)
- Centrifugal model tests research of uplift behavior of rock-socketed piles overburden soil
.....WANG Qinke, MA Jianlin, CHU Jinglei, SUN Zhenmao(3097)
- Analysis on the uncertainty of design variables of shallow foundation in railway bridge.....ZHANG Weizhen(3106)
- Experimental study on large scale horizontal push-shear test of municipal solid waste
.....HE Jianqing, HU Wei, LIAO Xianghua, WANG Yonghua, GAO Wenhua(3113)
- Research on condition monitoring and evaluation of heavy haul railway subgrade.....TANG Yongkang(3120)

Bridge, Tunnel and Structure

- Influence of directivity of near-fault impulse effect on seismic response of long span cable stayed bridge
.....CHEN Zhiqiang, ZHENG Shixiong, CHEN Zhiwei, HONG Chengjing, LI Xi(3127)

- Cellular automata model for chloride ion transport in concrete bridges.....MA Junjun, LIN Pengzhen(3135)
- Effect of fastener stiffness on frequency response of vehicle-track-bridge coupling system.....ZHANG Yan, LU Peijun(3141)
- Study on peak strain correction based on the impact of finite element mesh size effect
.....PENG Rongxin, CHEN Aijun, HE Guojing, WANG Jiejun(3148)
- Analysis of shear lag effect in construction stage of wide box girder extradosed cable-stayed bridge with large flanges
.....CHEN Qianshu, HUANG Wenlong, YANG Menggang(3158)
- Parametric analysis of inner longitudinal diaphragm in steel box girder of long-span cable-stayed bridge based on fatigue performance.....OUYANG Yang, ZHU Zhiwen, CAI Jingyao(3165)
- Reliability analysis of tunnel face considering the effect of pore water pressure and Hoek-Brown failure criterion
.....ZHANG Jiahua, WANG Weijun, ZHANG Daobing, MA Zongyu(3173)
- Analysis of transverse effective rigidity ratio of quasi-rectangular shield tunnel
.....DING Zude, FU Jiang, WANG Zhiliang, GUO Yongfa, LI Xianghong(3181)
- Comparison and optimization of alternatives to groundwater control for a deep excavation in highly permeable sand and gravel
.....LIU Shengli, JIANG Shenggang, CAO Chengyong(3189)
- Optimization discussion of support structure for abnormal horizontal deformation section of Xiaoshan tunnel.....WANG Jun(3198)
- Wind loading reduction on large-span flat roofs using moving average method.....ZHU Zhiwen, CHENG Guoyong(3208)
- The method for structure responses uncertainty analysis based on limited data
.....LUO Yongpeng, HUANG Fanglin, LIU Jingliang, LU Siping, XU Xutang(3217)

Vehicles and Equipment

- Influence of track beam's dynamic behavior on running performance of straddle-type monorail vehicle
.....LI Xiaozhen, GE Yanlong, JIN Zhibin, ZHU Yan(3225)
- Vertical stiffness matching of elastic split fastening system based on theory of vibration power flow
.....WANG Li, XIAO Jieling, WANG Qiang, WANG Ping, WANG Guan(3232)
- Construction machinery cluster configuration of railway filled embankment based on green construction
.....ZHENG Yuxi, BAO Xueying(3239)
- Research on image enhancement preprocessing method in rail surface defects detection system
.....YUE Biao, MIN Yongzhi, MA Hongfeng, XIAO Benyu(3248)
- Research on fault diagnosis method for on-board equipment of train control system based on GA-BP neural network
.....ZHOU Lujie, DONG Yu(3257)

Transportation · Logistics · Engineering Management

- Study on externality evaluation of urban rail transit though entropy-weight and grey clustering model
.....LIU Qingyi, JIANG Qiwei, WANG Mengyuan(3266)
- Prediction for railway passenger volume based on modified PSO optimized LSTM neural network
.....LI Wan, FENG Fenling, JIANG Qiwei(3274)
- Risk evaluation for operational requirements of CR express with BDD-based method.....FENG Fenling, NIU Tiancong(3281)
- Supervision and management evaluation of urban rail transit service quality
.....CHEN Weiya, YAN Xiujuan, PAN Hui, DENG Liyuan, WEN Bangyan(3288)