



ISSN 1001-4632
CN 11-2480/U

中国铁道科学

ZHONGGUO TIEDAO KEXUE

CHINA RAILWAY SCIENCE

3

2013

第34卷 第3期

Vol.34 No.3



中国铁道科学研究院主办

万方数据

CHINA RAILWAY SCIENCE

Vol. 34 No. 3 (Series No. 130) May 2013

CONTENTS

- Investigation into the Evaluation Method for Vibration Damping Effect of Track Systems
..... **WU Yongfang** (1)
- Research on the Dynamic Performances of the Steel Truss Girder Main Bridge of Jinan
Yellow River Extra Large Bridge for High-Speed Railway **YAO Jingchuan, et al** (7)
- Experimental Study on Dynamic Behaviors of Bridges for 300~350 km · h⁻¹ High Speed
Railway **YANG Yiqian, et al** (14)
- Experimental Study on Structure-Borne Noise of Railway 32 m Simply-Supported Concrete
Box-Girder **LI Xiaozhen, et al** (20)
- Evaluation Method for Bridge Strengthening Scheme Based on Energy Consumption and
Carbon Emission **WU Wenjie, et al** (27)
- Analysis on Safety during Construction Process for Large-Scale and Super-Long Steel
Sheet Pile Cofferdam of Deepwater Foundation **TANG Jinsong, et al** (32)
- Model Test on Longitudinal Mechanical Properties of Single and Double Layered Linings for
Railway Shield Tunnel **HE Chuan et al** (40)
- Analysis on Dynamic Stress of Tunnel Structure under Heavy Haul Train
..... **YIN Chengfei, et al** (47)
- Analysis of Stratum Deformation Rules Induced by the Construction of Double-Tube Parallel
Shield Tunnels for Metro **WANG Zhongchang, et al** (53)
- Research on Cutterhead Torque during Earth Pressure Balance Shield Tunneling in Sand
Gravel Strata of Beijing Metro **JIANG Hua, et al** (59)
- Equivalent Linearization of Nonlinear Dry Friction Force of Bogie in Heavy Haul Freight
Car and Its Application in Vehicle-Bridge Coupling **ZHANG Baoan, et al** (66)
- Estimation Method for the Secondary Suspension System Parameters of Railway Vehicle
Improved by Repeated Uniform Sampling Strategy **FANG Yu, et al** (72)
- Study on the Pneumatic Simulation Model of Railway Vehicle Air Spring System Based on
AMESim **QI Zhuang, et al** (79)
- Thermal Simulation Design Method for the Auxiliary Converter Case of High-Speed EMU
..... **YANG Ning, et al** (87)
- Influence of Font Size of EMU Display and Control Interface on Driver's Recognition
Efficiency **GUO Zizheng, et al** (93)
- Study on Scheme for Thermal Capacity Test on Traction System of Urban Rail Transit
Vehicle **ZHANG Bo, et al** (98)
- Study on Complexities in Relational Network of Component Maintenance for High-Speed
Train in Network Perspective **ZONG Gang, et al** (105)
- System Interface Analysis for High Speed Railway **WANG Feng, et al** (109)
- A Method for Robust Train Diagram Generation Based on Improved Particle Swarm
Optimization Algorithm **ZHAO Hongtao, et al** (116)
- A Wavelet Analysis Based LS-SVM Rail Transit Passenger Flow Prediction Method
..... **YANG Jun, et al** (122)
- Intelligent Seat Allotment Method for Railway Passenger Train Based on Passenger
Flow Forecast **WANG Hongye, et al** (128)
- Prediction on Medium and Long Term Energy Consumption of Urban Rail Transit Network
in Beijing **WANG Zijia, et al** (133)
- Research and Test on Early Warning and Control Techniques for Temporary Speed Limit of
Existing Railway Line **ZHU Wei, et al** (137)

中国铁道科学

第 34 卷第 3 期(总第 130 期)2013 年 5 月

目 次

轨道减振效果系统评价方法研究	吴永芳(1)
高铁济南黄河特大桥钢桁梁主桥动力性能研究	姚京川, 尹 京, 王 巍, 等(7)
时速 300~350 km 高速铁路桥梁动力性能试验研究	杨宜谦, 姚京川, 孟 鑫, 等(14)
铁路 32 m 混凝土简支箱梁结构噪声试验研究	李小珍, 张 迅, 刘全民, 等(20)
基于能耗和碳排放的桥梁加固方案评价方法	武文杰, 杨朋超, 王元丰(27)
深水基础大规模超长钢板桩围堰施工过程安全性分析	汤劲松, 熊保林(32)
铁路盾构隧道单、双层衬砌纵向力学性能的模型试验研究	何 川, 郭 瑞, 肖明清, 等(40)
重载列车作用下隧道结构的动应力分析	尹成斐, 付兵先, 马伟斌(47)
地铁盾构双隧道施工诱发的地层变形规律分析	王忠昶, 王海涛, 朱训国, 等(53)
北京地铁砂卵石地层土压平衡盾构施工刀盘扭矩研究	江 华, 江玉生, 张晋勋, 等(59)
重载货车转向架非线性干摩擦力等效线性化及在车桥耦合中的应用	张宝安, 陆正刚, 李 奇(66)
基于再次均匀采样策略改进轨道车辆二系悬挂系统参数估计方法	方 宇, 陈 龙, 李晓斌, 等(72)
基于 AMESim 平台的轨道车辆空气弹簧系统气动力学仿真模型研究	戚 壮, 李 蒂, 黄运华, 等(79)
高速动车组辅助变流器箱体的热仿真设计方法	杨 宁, 宋术全, 李 红(87)
动车组显控界面字体大小对司机识别效率的影响	郭致政, 李永建, 马国忠, 等(93)
城轨列车牵引系统热容量试验方案研究	张 波, 陆 阳, 王志峰(98)
网络视角下高速列车部件维修关系网络复杂性研究	宗 刚, 张 超, 刘文芝(105)
高速铁路系统接口分析	王 峰, 王 澜, 姚建伟(109)
基于改进粒子群优化算法的鲁棒性列车运行图编制方法	赵宏涛, 苗义峰, 王 涛, 等(116)
基于小波分析的最小二乘支持向量机轨道交通客流预测方法	杨 军, 侯忠生(122)
基于客流预测的铁路旅客列车票额智能分配方法	王洪业, 吕晓艳, 周亮瑾, 等(128)
北京城市轨道交通中远期能耗预测研究	王子甲, 陈 峰, 施仲衡(133)

· 成果简报 ·

既有线临时限速预警控制技术研究 with 试验	朱 玮, 王廷昌(137)
-------------------------------	---------------

· 科技信息 ·

CRH ₃ 型动车组牵引及辅助变流器自主化研究通过方案和试用评审	(31)
中国铁道科学研究院 2012 年科技成果简介	陈 源(65)

征稿启事	(144)
------------	-------

期刊基本参数: CN 11-2480/U * 1979 * b * A4 * 144 * zh * P * ¥20.00 * 1200 * 23 * 2013-05