



铁路运输领域T2级高质量期刊
 中国科技核心期刊
 中国高校优秀科技期刊
 中国科技论文在线优秀期刊
 江西省第五届优秀期刊

ISSN 1005-0523
 CN 36-1035/U

華東交通大學 学报

JOURNAL OF EAST CHINA JIAOTONG UNIVERSITY

第38卷 总第180期
 Vol.38 Sum180



華東交通大學 建校50周年
 THE 50TH ANNIVERSARY OF EAST CHINA JIAOTONG UNIVERSITY

中国 南昌

NANCHANG CHINA

2021 4



华东交通大学学报

第三十八卷 第四期

二〇二一年八月

华东交通大学学报

第 38 卷 第 4 期 2021 年 8 月

目 次

交通基础设施

- 列车荷载下软土路基长期沉降预测研究进展 徐长节,丁海滨,童立红(1)
- 温度变化下基于固有频率聚类分析的空间网格结构损伤诊断 韩庆华,马 乾,刘 名,徐 杰(8)
- 时速 300 km/h 高速列车诱发高架箱梁结构振动特性分析 雷晓燕,王鹏生,翁凌霄,罗 锐(18)
- 数字孪生研究进展及在铁路智能运维中的应用 陈华鹏,鹿守山,雷晓燕,伍伟斌(27)
- 高速移动荷载作用下无砟轨道路基动位移研究 冯靖淳,罗文俊,徐鑫洋,杜 可(45)
- 基于声子晶体理论的轨道交通减振降噪研究综述 冯青松,梁玉雄,陆建飞(54)

交通管理与控制

- 存在扰动和时滞的高速列车自适应制动控制 谭 畅,李毅清,杨 辉(64)
- 基于改进的 YOLOv3 接触网鸟巢检测与识别 屈志坚,高天姿,池 瑞,杨 行(72)

载运工具装备

- 奇异性弹性场分析的新型超级奇异单元法综述 王从曼,平学成,王醒醒,陈梦成(81)
- 铁道车轮踏面损伤实时监测方法研究综述 肖 乾,姜雄峰,刘海涛,谢锋云,周生通(99)
- 弓网系统载流摩擦磨损研究现状 沈明学,李含欣,季德惠,熊光耀(113)

JOURNAL OF EAST CHINA JIAOTONG UNIVERSITY

Vol.38 No.4 Aug. 2021

CONTENTS

- Research Progress in the Long-Term Settlement of Soft Soil Subgrade Subjected to Train Load
..... Xu Changjie, Ding Haibin, Tong Lihong(1)
- Damage Diagnosis of Space Grid Structure Based on Natural Frequency Clustering Analysis under Varying Temperature Effects
..... Han Qinghua, Ma Qian, Liu Ming, Xu Jie(8)
- Analysis of Vibration Characteristics of Elevated Box Girder Structure Induced by High-Speed Train at 300 km/h
..... Lei Xiaoyan, Wang Pengsheng, Weng Lingxiao, Luo Kun (18)
- Advance in Research on Applications of Digital Twin in Intelligent Railway Operation Management
..... Chen Huapeng, Lu Shoushan, Lei Xiaoyan, Wu Weibin(27)
- Study on Dynamic Displacement of Ballastless Track Subgrade Under High-Speed Moving Load
..... Feng Jingchun, Luo Wenjun, Xu Xinyang, Du Ke(45)
- Review on Railway Vibration and Noise Reduction Based on Phononic Crystal Theory
..... Feng Qingsong, Liang Yuxiong, Lu Jianfei(54)
- Adaptive Braking Control for High-Speed Trains with Disturbances and Time Delays Tan Chang, Li Yiqing, Yang Hui(64)
- Detection and Recognition of Bird Nests in Overhead Catenary Systems Based on Improved YOLOv3
..... Qu Zhijian, Gao Tianzi, Chi Rui, Yang Hang(72)
- Review of the Novel Super Singular Element Method for Singular Elastic Field Analysis
..... Wang Congman, Ping Xuecheng, Wang Xingxing, Chen Mengcheng(81)
- Research on Real-Time Monitoring Methods for Railroad Wheel Tread Defects: A Review
..... Xiao Qian, Jiang Xiongfeng, Liu Haitao, Xie Fengyun, Zhou Shengtong(99)
- Research Status of Current-Carrying Friction and Wear in Pantograph-Catenary System
..... Sheng Mingxue, Li Hanxin, Ji Dehui, Xiong Guangyao(113)