

ISSN 1671-1637
CN 61-1369/U
CODEN JYGXAS

交通运输工程学报

JOURNAL OF TRAFFIC AND TRANSPORTATION ENGINEERING

第 22 卷 2022
第 2 期

ISSN 1671-1637



9 771671 163226



Vol. 22 No. 2
中国·西安

目 次

• 综 述 •

铁道车辆车轮扁疤故障检测技术综述·····	曾 京,彭莘宇,汪群生,张 浩,梁松康 (1)
车辆通风式制动盘内部通道对流换热研究综述·····	李 杰,陶 龙,顾佳玲,陈 诚,陈 颖 (19)
轨道交通中异构智融车载网络发展综述 ·····	董 平,尹晨洋,张宇阳,张宏科 (41)
桥梁结构非线性模型修正研究综述·····	王佐才,丁雅杰,戈 壁,袁子青,辛 宇 (59)

• 道路与铁道工程 •

有砟高铁捣固作业轨向平顺性控制方法·····	时 瑾,张雨潇,陈云峰,王晓凯,王英杰 (76)
高速铁路道岔尖轨不足位移控制方法·····	王 璞,曾瑞东,王树国 (87)
小半径曲线钢轨非对称打磨廓形设计方法 ·····	李 立,彭敬康,崔大宾,雷鹏程 (99)
过度磨损钢轨的打磨廓形设计方法·····	林凤涛,邓卓鑫,庞华飞,王松涛,杨 建,丁军君,陈道云(111)
基于残差卷积网络的浮置板轨道钢弹簧损伤检测 ·····	朱胜阳,张庆铨,袁站东,翟婉明(123)
基于列车振动的高速铁路桥墩沉降控制阈值 ·····	陈兆玮,翟婉明(136)
图像分块下的隧道裂缝识别方法·····	尹冠生,高建国,史明辉,靳明珠,拓宏亮,李 昌,张 博(148)
考虑各向异性形貌特征的岩体结构面刚度计算模型 ·····	包 含,胥勋辉,兰恒星,晏长根,许江波,刘长青(160)
北京市隧道下穿施工引起城市路面沉降的影响规律回归分析 ·····	伍毅敏,刘延安,王 恒,韩大有,陈子凡,王 超(176)
多车道高速公路超高过渡段积水分布数值模拟与规律分析 ·····	赵建有,郭万江,贾兴利,陈星澎(187)

• 载运工具运用工程 •

考虑旋转效应的弹性车轮降噪效果与影响参数研究·····	圣小珍,葛 帅,成 功,周 信,黄振鑫(197)
三维弹塑性轮轨滑动接触热机耦合分析·····	杨 冰,戎有鑫,阳光武,肖守讷,朱 涛(208)
基于台架仿真模型的高速列车齿轮箱轴承载荷获取方法 ·····	豆 硕,刘志明,李 强,任尊松,杨广雪(219)
船舶救助艇释放运动建模与仿真 ·····	邱绍杨,任鸿翔,张秀凤,王德龙,孙 健,肖方兵(233)

• 交通运输规划与管理 •

非自由交通流的 non-FIFO 车辆轨迹估计算法 ·····	胡 尧,赵睿莎(246)
连续交通网络设计的全局双层多项式优化模型 ·····	俞礼军,陈 睿(259)
高密度航天发射期间亚轨道碎片危险区快速预测与改航路径规划方法 ·····	陈万通,田书雨(268)
基于铁路货运能力的集港集装箱班列组织优化·····	连 峰,杜怡颖,杨忠振(277)
基于动态流场数据的虚拟港口建模方法 ·····	陈立家,王 凯,魏天明,郝国柱(287)

• 交通信息工程及控制 •

基于实时监测参数的民用飞机重着陆预警方法·····	蔡 景,蔡坤烨,黄世杰(298)
基于正态云模型和模糊层次分析法的列车通信网络性能评估方法 ·····	贺德强,柳国强,陈彦君,苗 剑,姚晓阳(310)

CONTENTS

• Review •

- Review on detection technologies of railway vehicle wheel flat fault
..... ZENG Jing, PENG Xin-yu, WANG Qun-sheng, ZHANG Hao, LIANG Song-kang (1)
- Review on convective heat transfer in internal channel of ventilated brake disc of vehicle
..... LI Jie, TAO Long, GU Jia-ling, CHEN Cheng, CHEN Ying (19)
- Review on development of heterogeneous smart cooperative vehicular network in rail transit
..... DONG Ping, YIN Chen-yang, ZHANG Yu-yang, ZHANG Hong-ke (41)
- Review on nonlinear model updating for bridge structures WANG Zuo-cai, DING Ya-jie, GE Bi, YUAN Zi-qing, XIN Yu (59)

• Road and railway engineering •

- Track alignment irregularity control method for tamping operation of ballasted high-speed railway
..... SHI Jin, ZHANG Yu-xiao, CHEN Yun-feng, WANG Xiao-kai, WANG Ying-jie (76)
- Control method for insufficient displacement of switch rail in high-speed railway turnout
..... WANG Pu, ZENG Rui-dong, WANG Shu-guo (87)
- Design method for asymmetric grinding profile of rails in sharp curves LI Li, PENG Jing-kang, CUI Da-bin, LEI Peng-cheng (99)
- Design method of grinding profile of over worn rail
..... LIN Feng-tao, DENG Zhuo-xin, PANG Hua-fei, WANG Song-tao, YANG Jian, DING Jun-jun, CHEN Dao-yun (111)
- Damage detection for floating-slab track steel-spring based on residual convolutional network
..... ZHU Sheng-yang, ZHANG Qing-lai, YUAN Zhan-dong, ZHAI Wan-ming (123)
- Control threshold of pier settlement in high-speed railways based on train vibrations CHEN Zhao-wei, ZHAI Wan-ming (136)
- Tunnel crack recognition method under image block
..... YIN Guan-sheng, GAO Jian-guo, SHI Ming-hui, JIN Ming-zhu, TUO Hong-liang, LI Chang, ZHANG Bo (148)
- Calculation model of rock joint stiffness considering anisotropic morphology characteristics
..... BAO Han, XU Xun-hui, LAN Heng-xing, YAN Chang-gen, XU Jiang-bo, LIU Chang-qing (160)
- Regression analysis of influence law of urban pavement settlement caused by underpass tunnel construction in Beijing
..... WU Yi-min, LIU Yan-an, WANG Heng, HAN Da-you, CHEN Zi-fan, WANG Chao (176)
- Numerical simulation and law analysis of water accumulation distribution at superelevation transition section of multilane expressway
..... ZHAO Jian-you, GUO Wan-jiang, JIA Xing-li, CHEN Xing-peng (187)

• Transportation vehicle engineering •

- Study of noise reduction effect and influencing parameters for a resilient wheel considering rotation effect
..... SHENG Xiao-zhen, GE Shuai, CHENG Gong, ZHOU Xin, HUANG Zhen-xin (197)
- Thermal-mechanical coupling analysis of three-dimensional elastic-plastic wheel-rail sliding contact
..... YANG Bing, RONG You-xin, YANG Guang-wu, XIAO Shou-ne, ZHU Tao (208)
- Acquisition method of dynamic load of high-speed train gearbox bearing based on bench simulation model
..... DOU Shuo, LIU Zhi-ming, LI Qiang, REN Zun-song, YANG Guang-xue (219)
- Modeling and simulation of rescue boat's launching from a ship
..... QIU Shao-yang, REN Hong-xiang, ZHANG Xiu-feng, WANG De-long, SUN Jian, XIAO Fang-bing (233)

• Transportation planning and management •

- Non-FIFO vehicle trajectory estimation algorithm under non-free traffic flow HU Yao, ZHAO Rui-sha (246)
- Global bilevel polynomial optimization model for continuous traffic network design YU Li-jun, CHEN Rui (259)
- Rapid prediction and rerouting planning method of suborbital debris hazard zones during high-density space launches
..... CHEN Wan-tong, TIAN Shu-yu (268)
- Operation optimization of container train liner based on railway freight capacity LIAN Feng, DU Yi-ying, YANG Zhong-zhen (277)
- Virtual port modeling method based on dynamic fluid field data CHEN Li-jia, WANG Kai, WEI Tian-ming, HAO Guo-zhu (287)

• Traffic information engineering and control •

- Early warning method for heavy landing of civil aircraft based on real-time monitoring parameters
..... CAI Jing, CAI Kun-ye, HUANG Shi-jie (298)
- Evaluation method of train communication network performance based on normal cloud model and fuzzy analytic hierarchy process
..... HE De-qiang, LIU Guo-qiang, CHEN Yan-jun, MIAO Jian, YAO Xiao-yang (310)