

目 次

铁道建筑

TIEDAOJIANZHU

2010年第10期(总440期)
月刊
2010年10月出版

1961年7月创刊
全国中文核心期刊
全国科技论文统计和分析用刊
中国学术期刊综合评价数据库
统计源期刊
中国学术期刊全文数据库收录
期刊

主编 叶阳升 副主编 王红

主 管: 中华人民共和国铁道部
主 办: 中国铁道科学研究院
地 址: 北京市海淀区大柳树路2号
邮政编码: 100081
编辑电话: (010)51849235 51893552(市电)
(021)49235 93552(路电)
广告电话: (010)51893587(市电)
(021)93587(路电)
电子信箱: TDJZ@rails.com.cn
排 版: 清华同方光盘股份有限公司
数据加工中心
印 刷: 北京昌平百善印刷厂
总发行处: 北京报刊发行局
订 购 处: 全国各邮电局
邮发代号: 2-405
国内统一刊号: CN 11-2027/U
国际标准刊号: ISSN 1003-1995
广告经营许可证: 京海工商广字第8046号

每期订价: 10元 全年订价: 120元

桥 梁

- 异形独塔双层桥面斜拉桥动力特性及地震反应分析 杨吉新 朱伟伟 丁兰等 (1)
 大跨钢桁架梁气动选型及气动参数风洞试验研究 徐洪涛 马存明 廖海黎等 (4)
 跨座式单轨交通关节可挠型道岔荷载试验研究 郭凡 杨永清 刘国军等 (8)
 福州鼓山大桥2#主墩钻孔桩施工质量控制 魏文云 (11)
 贝雷梁支架体系在混凝土系杆拱桥施工中的应用 严朝峰 (14)
 钢管混凝土系杆拱施工过程的控制 项影明 (17)
 桥面喷涂聚脲防水层常见质量缺陷与应对措施 蒋宗全 郭晓安 屈高见等 (19)
 既有重载铁路墩梁加固分析 李承君 马林 (22)
 双柱式桥墩横向加固技术研究和实践 李荣昌 张传东 陈学民 (26)
 浮式龙门法在某大桥钻孔桩施工中的应用 张碧 孙立功 冯小勇 (30)
 南坡坪黄河特大桥钢栈桥工程施工技术 罗晓刚 (33)
 圆砾土地层钻孔灌注桩施工质量问题的成因分析及预防处理 刘洪江 (35)

隧道与地下工程

- 内燃牵引单线铁路长大隧道通风系统的自动控制设计 霍宗文 王岩 (38)
 高尾顶隧道进口滑坡分析 王勇刚 (41)
 金牛山隧道下穿京福高速公路施工风险评估分析 杨忠 蒋宗全 李兵等 (44)
 BSL隧道施工变形开裂的成因及处理 张远荣 朱宏光 (47)
 城峰1#, 2#, 3#隧道小间距段出洞方案 曹鸽 余朝阳 (51)
 棋盘石隧道溶洞突水成因分析及技术处理措施 孙伟亮 (54)
 盾构在道路和铁路下推进引起的沉降对比研究 王国栋 肖立 张庆贺 (57)
 苏州地铁超宽超深基坑工程监测与分析 贾彩虹 杨国忠 张雪颖 (61)

路基与地基基础

- 线路过度段用水泥碎石的收缩特性及其影响分析 魏强 赵国堂 刘俊飞 (66)



封面简介

作为全球领先的泵车制造商，三一重工自主创新研发的三一底盘泵车，以独特精致的设计，可靠强劲的动力，通过了1500万km的里程测试，现已拥有臂架长度为25m、37m、40m、43m、46m、50m、52m和56m的全系列产品。

目 次

基于底摩擦试验的岩石边坡变形研究

- 卢达 黎梦军 (70)
衡重式桩板挡墙的应用与研究 刘永春 王石磊 (73)
无砟轨道路基过渡段水泥稳定碎石物理力学性质试验初探 张泉 罗强 魏永幸 (76)
初始剪应力对软黏土峰值孔压影响试验研究 柳伟 程振华 (80)
交通荷载作用下风积沙路基动力响应分析 黄俊文 马涛 杨长卫等 (83)
路堤荷载下带帽桩-网复合地基力学性状有限元分析 高胜利 魏宏 刘天福 (87)
TBS 植被防护在公路边坡治理中的应用 杨建宏 陈浙江 王玲娟等 (90)

【线路及其养护维修】

高速列车在不同运行工况下速度变化与坡度和坡长的关系研究

- 尹国栋 魏庆朝 招阳 (93)
CRTS I型板式轨道在地震荷载作用下的动力响应 宋杨 张瑶 陈小平等 (97)
现浇道床板弹性模量变化对结构的影响分析 盖晓野 张丽平 赵坪锐 (100)
双块式无砟轨道的共振性能分析 邹小魁 吕定花 (103)
客运专线 18 号无砟道岔用硫化垫板的研究设计 方杭玮 刘刚 邓娇等 (106)
CRTS II型轨道板 2×42 预制生产线关键技术 付雷锋 马春生 张玉军等 (109)
CRTS II型轨道板 2×42 预制生产线预应力钢筋内应力和摩阻力测定技术 许传波 马春生 付雷锋 (114)
CRTS II型板式无砟轨道可调高底座板模板的研制与应用 杨忠 蒋宗全 林茂等 (116)
长枕埋入式无砟道岔施工技术 冯渭和 (120)
奎北铁路特大桥架梁及超长距离铺轨施工工艺 乔建民 (124)

【其 它】

混凝土材料耐久性能的影响因素及评价指标研究

- 冯仲伟 李化建 李林香 (126)
带肋方钢管混凝土柱的经济性分析 黄义勇 黄宏 (130)
GFRP 筋与混凝土黏结性能拉拔试验研究 师晓权 张志强 李志业等 (133)
声波透射法在灌注桩完整性检测中的应用研究 郑明燕 孙洋波 (137)

CONTENTS

Bridge

- Dynamic performance and earthquake response analysis of cable-stayed bridge with special-shaped single pylon and double-layer bridge deck YANG Jixin ZHU Weiwei DING Lan et al(1)
Aerodynamic type-selection and aerodynamic parameters test study at wind tunnel for large-span steel truss girder XU Hongtao MA Cumming LIAO Haili et al(4)
Study on flexible turnout loading test in joint of straddled-type monorail GUO Fan YANG Yongqing LIU Guojun et al(8)
Construction quality control over bored pile used in main pier No.2 of Fuzhou Gushan bridge WEI Wenyun(11)
Application of Bailay beam scaffolding system in construction of concrete tie-arch bridge YAN Chaofeng(14)
Control over construction process of concrete -filled tubular tie-arch bridge XIANG Yingming(17)
Usual quality defects of polyurea waterproof coating layer of bridge deck and its countermeasures JIANG Zongquan GUO Xiaolan QU Gaojian et al(19)
Analysis on strengthening of bridge pier and girder on existing heavy haul railway LI Chengjun MA Lin(22)
Study and practice on transverse strengthening technology for bridge's double-column pier LI Rongchang ZHANG Chuandong CHEN Xuemin(26)
Application of floating gantry measure in construction of bored pile for certain bridge ZHANG Bi SUN Ligong FENG Xiaoyong(30)
Construction technology on steel detour bridge used for building of Nanpiping Yellow River super-large bridge LUO Xiaogang(33)
Causes analysis of construction quality defects and its prevention measures of bored pile in gravelly soil LIU Hongjiang(35)

Tunnel and Underground Works

- Automatic control design on ventilation system for single-track railway long tunnel in condition of diesel traction HUO Zongwen WANG Yan(38)
Analysis on landslide in entrance zone of Gaoweidong tunnel WANG Yonggang(41)
Construction risk assessment analysis on Jinniushan mountain tunnel passing through under Beijing-Fuzhou expressway YANG Zhong JIANG Zongquan LI Bing et al(44)
Causes analysis and treatment of deformation and cracking during construction of tunnel under biased loading ZHANG Yuanrong ZHU Hongguang(47)
Construction scheme of exit zone of Chengfeng tunnels No.1 , No.2 and No.3 with small space apart CAO Ge YU Chaoyang(51)
Cause analysis of gushing water in Qipanshi tunnel karst cavern and technical treatment measures SUN Weiliang(54)
Comparative study on settlement induced by shield-driving tunnel under highway or railway WANG Guodong XIAO Li ZHANG Qinghe(57)
Construction monitoring and analysis for super-wide and super-deep foundation pit in Suzhou metro JIA Caihong YANG Guozhong ZHANG Xueying(61)

Subgrade • Foundation

- Shrinkage performance and its influence analysis of cement-crushed stone used in transition zone of railway WEI Qiang ZHAO Guotang LIU Junfei(66)
Study on rock slope deformation based on bottom friction test

- LU Da LI Mengjun(70)
Application and study of weight-balanced-type pile slab retaining wall LIU Yongchun WANG Shilei(73)
Elementary test exploring on physio-mechanical properties of cement-stabilized crushed stone used in subgrade transition zone of ballastless track ZHANG Quan LUO Qiang WEI Yongxing(76)
Experimental study about influence of initial shear stress on peak pore water pressure of soft clay LIU Wei CHENG Zhenhua(80)
Dynamic response analysis of blown sand subgrade under traffic loading action HUANG Junwen MA Tao YANG Changwei et al(83)
Finite element analysis on mechanical behaviour of capped pile-net composite foundation under embankment loading action GAO Shengli WEI Hong LIU Tianfu(87)
Application of TBS (Thick-layer Base Material Spraying) vegetation protection in treatment of highway slope YANG Jianhong CHEN Zhejiang WANG Lingjuan et al(90)

Track and Its Maintenance

- Study on relationship between high speed train's speed change and gradient, length of slope in different travelling condition YIN Guodong WEI Qingchao ZHAO Yang(93)
Dynamic response of CRTS-I slab-type track under earthquake loading action SONG Yang ZHANG Yao CHEN Xiaoping et al(97)
Analysis about influence of elastic modulus change of casting in-situ formation slab on track structure GAI Xiaoye ZHANG Liping ZHAO Pingrui(100)
Resonance performance analysis of double-block-type ballastless track ZOU Xiaokui LU Dinghua(103)
Design study on sulphatized pad used for ballastless turnout No.18 on passenger-dedicated railway FANG Hangwei LIU Gang DENG Jiao et al(106)
Key technologies of CRTS-II-type track slab prefabricated at production line (productivity: 2×42 blocks) FU Leifeng MA Chunsheng ZHANG Yujun et al(109)
Measuring technology of interior stress and friction resistance in prestressed steel bar in CRTS-II-type track slab prefabricated at production line (productivity: 2×42 blocks) XU Chuanbo MA Chunsheng FU Leifeng(114)
Research and manufacture and use of formwork designed for height-adjustable bottom plate used for CRTS-II slab-type ballastless track YANG Zhong JIANG Zongquan LIN Mao et al(116)
Construction technology of long sleeper-embedded-type ballastless turnout FENG Weihe(120)
Construction procedure on erection of super-large bridge girder and laying of super-long track for Kuitun-Beitun railway QIAO Jianmin(124)

Other

- Study on influential factors and assessment indexes of duration property of concrete FENG Zhongwei LI Huajian LI Linxiang(126)
Economic analysis on square concrete-filled tubular column with ribs HUANG Yiyong HUANG Hong(130)
Uplift-test study on cohesive performance of GFRP (Glass Fiber Reinforcing Plastic)bar with concrete SHI Xiaoquan ZHANG Zhiqiang LI Zhiye et al(133)
Study on application of sonic prospecting method in inspection of integration of pouring foundation pile ZHENG Mingyan SUN Yangbo(137)