

国家新闻出版广电总局A类学术期刊 中国核心期刊(遴选)数据库《中国学术期刊综合评价数据库》统计源期刊《中国期刊(全文数据库)》《中国期刊网》全文收录期刊



工程建设与设计

主办: 国家机械工业局工程建设中心 中国机械工业勘察设计协会 中国中元国际工程有限公司 CN 11-3914/TU 2023 年第04月上 总第501期

CONSTRUCTION DESIGN & FOR ENGINEERING
工程建设与设计



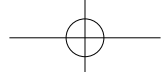
2023年第04月上 总第501期

亚洲金融大厦暨亚洲基础设施投资银行总部

ISSN 1007-9467



9 771007 946233



动态资讯

- 01 “住建部将规范优化工程建设项目审批”等信息
13则

建筑与结构设计

- 03 老得其所：旧住房改造中的适老化设计初探——
以上海“美丽家园”建设为例（孙琳）
- 06 九年一贯制学校景观设计浅析——以上海师范大学
附属宁波实验学校景观设计为例
（张斌，陈波，方远）
- 10 南山村规划设计的思路探索（陈晓青）
- 13 干细胞实验室设计——以树兰（济南）国际医院
为例（杜莉，付秀秀）
- 16 基于有限元模型的改造多格矩形水池底板内力计
算分析（马梓涵，王强）
- 20 电梯检修吊钩设计方法探讨（张志兵，吴翼亮）
- 23 车致振动舒适性评价标准的对比研究（彭宇怀）
- 27 倾斜圆管柱与钢梁错位转换节点深化及制作技术
（胡锦涛，苏铠，王加林，李军，孙友林）
- 30 基于遗传退火算法的高层建筑结构抗震设计研究
（李斌洲）
- 33 装配整体式结构常见配筋问题分析（邓立彬）
- 36 大型落地式钢筒仓数值分析（赵志强）

基础工程设计

- 39 GM(1, 1)模型在边坡变形预测中的优化研究
（孙斌）
- 42 汽轮发电机基础结构设计实例
（汪秒，谭丰，杨玖林）

- 46 皖江经济带芜湖二桥工程地质适宜性评价
（孙献国，朱山山，潘涛，秦皓）
- 50 基于速度传感器的低应变法检测基桩浅部缺陷曲
线特征分析（赵月）

公用工程设计

- 53 极端天气条件下城市轨道交通防排水对策分析
（李朋）
- 56 地铁机电安装管线综合排布技术要点探究
（汪伟建）
- 59 地下商场火灾危险性及消防监督管理研究
（敖蕾）
- 62 建筑消防设施在灭火救援中的应用（张凯丰）
- 65 试论建筑物防火监督的有效方法（杨锋泰）

市政·交通·水利工程设计

- 68 美丽乡村道路景观设计思路探讨——以建德市美
丽城乡精品示范线路打造工程为例（李晓雪）
- 71 深圳地铁3号线隧道交汇段地震响应分析
（李恒一，刘鹏程）
- 75 拉伊铁路施工过渡段路基变形控制技术研究
（唐晓冬）
- 78 郑州市轨道交通6号线盾构穿越南水北调总干渠段
技术控制及措施（关占明，王立平，黄晶，
梁敬超，刘海彬，侯志勇）
- 83 废弃黏土砖再生填料在市政道路施工中的应用研
究（胡彦凯）
- 86 贝雷梁加钢托架支撑结构计算分析研究
（党虎锋，梁雪冰）
- 90 地铁既有有线贯通改造工程组合道岔设计研究
（孙丽娟）
- 93 曲线钢箱梁桥优化设计研究（李爽）
- 97 地下车站设备外扩位置及其结构合理断面研究
（褚月华）
- 100 桥梁工程裂缝产生的原因和控制措施
（黄召）
- 103 基于海绵城市理念的市政道路排水设计研究
（胡亚萍，许晨阳）
- 106 特长隧道通风技术研究（陈乾）
- 109 基于绿色发展背景下的绿色生态公路建设体系发
展研究（王华峰，王勇，黄若楠，石凯，杨子豪）
- 113 不良土质环境对路面使用性能的影响研究
（侯雷强）



- 116 65 m系杆拱桥健康监测数据分析
(李贵祥, 杜世康)
- 120 市政排水管道淤积物特性分析及清除方式探讨
(赵红雷)
- 123 低碳理念下的城市道路植物景观绿化设计研究
(夏欣源, 许鹤, 谢庆龙)
- 126 公共健康视角下的风景园林研究(国歌)
- 129 基于RANSAC-LSM拟合模型的盾构隧道断面变形研究
(贾世杰)
- 132 钢桁架桥梁荷载试验分析
(姚佳利, 陈克, 欧阳稳)
- 137 高铁转体T构桥称重技术研究(李佳豪, 袁帅华)

环境工程设计

- 140 厌氧氨氧化技术处理光伏行业高氨氮废水
(刘云洲, 王艳)
- 143 河网地区水环境治理案例分析(厉智成, 程树辉, 李灵珍, 乔昕, 郭鑫宇, 寇晓霞)

智能与信息化

- 146 计算机视觉在管网缺陷快速定位中的应用进展
(王宵, 郭剑桥, 杨鑫, 李杰, 刘志翔, 张强)
- 150 BIM在高铁连续梁桥施工过程可视化中的应用
(武殿朝, 郑裕, 潘延超)

工程施工技术

- 153 高速铁路20 kV电力系统施工技术探讨
(孙吉, 孔祥杰, 张俊强)
- 156 桩板式无土路基桩基础施工技术
(凌汉清, 阮茂青, 汪盛宇)
- 159 复杂市域环境大交通量保通高架延伸高墩分次浇筑技术研究(杨卫军, 金文华, 倪文祥, 张正伟, 黄文明)
- 162 三跨下承式钢管混凝土拱桥吊杆更换关键技术与施工(江新)
- 166 清漳河特大桥水中墩钢板桩围堰承台施工解析
(蔡明智)
- 169 预制楼梯在高层建筑工程中的应用(欧阳文乐)
- 172 水平定向钻跨河技术的应用现状与发展研究
(巴万铭)
- 175 公路桥梁加固施工技术分析——以灌浆法加固技术为例(刘强)
- 178 综合勘察技术在岩土工程勘察中的应用思考
(范建敏)

- 181 公路施工中的低填浅挖路基施工技术研究
(刘增)
- 184 公路桥梁施工中软土地基施工技术的应用分析
(李睿乾)
- 187 高速公路路基沉降及施工控制技术研究(徐壬)
- 190 公路工程聚酯纤维改性沥青路面施工技术
(王莹)
- 193 注浆加固处理技术在高速公路路基施工中的应用
(黄海)
- 196 混凝土柱支撑后浇带梁板施工工艺的运用
(邹鹏威, 孟珊, 刘斌, 叶长洪, 戴靖琪)
- 199 沥青路面施工技术与质量控制要点探究(高岗)
- 202 高层建筑施工质量控制关键技术研究(杨茗旭)
- 206 超大跨度钢筋混凝土框架结构裂缝控制研究
(简廷新, 黄河, 冯雁波, 徐征)
- 209 岩土工程地质勘察技术与质量控制研究
(胡越凯, 蒋亮, 崔家瑞, 吕泽阳, 陈赫曦)
- 212 预制混凝土夹心保温墙板技术研究进展
(王雅贤, 易国辉, 秦昌安, 张国伟)
- 217 储煤筒仓维修试验工程的安全防控(孙鼎亮)

工程项目管理

- 221 装备制造企业搬迁建设的思考与建议(郜业见)
- 224 浅谈村镇污水治理PPP工程实施中的突出问题与应对策略(王超, 杨军威, 刘雪松, 朱常鑫)
- 227 松散联营体管控要点浅析
(王伟祥, 孙长江, 李瑞, 袁曙)
- 230 浅谈施工图设计偏差问题处理(赵昆)
- 233 市政工程施工企业的项目全过程成本管理分析
(雷声)
- 236 新能源电力工程造价的控制措施(肖宇奇)
- 239 EPC模式下铁路隧道衬砌缺陷整治标准化管理及整治技术研究(孙长升)
- 242 市政工程建设管理要点及管理体的完善对策探究(唐学云)
- 245 公路工程造价管理影响因素及控制策略应用研究
(徐佳强)
- 248 浅谈公路工程试验检测信息化管理(刘谋智)
- 251 砂石骨料绿色供应链调研分析(郭聪)

INFORMATION

- 01** "The Ministry of Housing and Urban-Rural Development will Standardize and Optimize the Approval of Engineering Construction Projects" Etc.13

Architectural and Structural Design

- 03** Getting Old is Where It Belongs: a Preliminary Study on the Aging Design in the Reconstruction of Old Areas—Taking the Construction of "Beautiful Homeland" in Shanghai as an Example(SUN Lin)
- 06** Landscape Design Analysis of Nine-Years School System—Taking the Landscape Design of Ningbo Experimental School Affiliated to Shanghai Normal University as an Example(ZHANG Bin, CHEN Bo, FAGN Yuan)
- 10** Exploration of the Idea of Planning and Design of Nanshan Village(CHEN Xiao-qing)
- 13** The Design of Stem Cell Laboratory—A Case Study of Shulan(Ji'nan) Hospital(DU Li, FU Xiu-xiu)
- 16** Calculation and Analysis of the Raft Foundation of the Multi-Grid Rectangular Pool Based on the Finite Element Model(MA Zi-han, WANG Qiang)
- 20** Discussion on the Design Method of Lift Hook(ZHANG Zhi-bing, WU Yi-liang)
- 23** Comparative Study of Different Vibration Comfort Evaluation Criterias(PENG Yu-huai)
- 27** Deepening and Fabrication Technology of Misalignment Transfer Joint Between Inclined Round Pipe String and Steel Beam (HU Jin-wei, SU Kai, WANG Jia-lin, LI Jun, SUN You-lin)
- 30** Seismic Design of High-Rise Building Based on Genetic Annealing Algorithm(LI Bin-zhou)
- 33** Common Reinforcement Problems Analysis of Prefabricated Integral Structures(DENG Li-bin)
- 36** Numerical Analysis of Large Flat-Bottom Steel Silo(ZHAO Zhi-qiang)

Engineering Design of the Ground

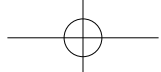
- 39** GM(1, 1) Model's Optimization of Slope Deformation Prediction(SUN Bin)
- 42** An Example of Turbine Generator Foundation Structure Design(WANG Miao, TAN Feng, YANG Jiu-lin)
- 46** Evaluation on Engineering Geological Suitability of Wuhu Second Bridge of Wanjiang Economic Belt(SUN Xian-guo, ZHU Shan-shan, PAN Tao, QIN Hao)
- 50** Analysis of Shallow Defect Curve Characteristics of Foundation Pile Detected by Low Strain Method Based on Velocity Sensor (ZHAO Yue)

Public Utilities Design

- 53** Analysis of Waterproof and Drainage Countermeasures of Urban Rail Transit Under Extreme Weather Conditions(LI Peng)
- 56** Research on Key Points of Comprehensive Arrangement Technology for Metro Electromechanical Installation Pipelines(WANG Wei-jian)
- 59** Study on Fire Risk and Fire Control Supervision and Management of Underground Shopping Malls(AO Lei)
- 62** Application of Building Fire Fighting Facilities in Fire Fighting and Rescue(ZHANG Kai-feng)
- 65** Discussion on the Effective Method of Building Fire Prevention Supervision(YANG Feng-tai)

Municipal-Traffic-Water Resources Engineering Design

- 68** Discussion on Road Landscape Design Ideas in Beautiful Countryside—Taking Jiande Fine Demonstration Beautiful Countryside Construction Project as an Example(LI Xiao-xue)
- 71** Seismic Response Analysis of Tunnel Intersection of Shenzhen Metro Line 3(LI Heng-yi, LIU Peng-cheng)
- 75** Research on Subgrade Deformation Control Technology in Construction Transition Section of Lagos to Ibadan Railway (TANG Xiao-dong)
- 78** Technical Control and Measures of Shield Tunneling Through the Main Canal Section of South-to-North Water Transfer Project for Zhengzhou Rail Transit Line 6(GUAN Zhan-ming, WANG Li-ping, HUANG Jing, LIANG Jing-chao, LIU Hai-bin, HOU Zhi-yong)
- 83** Study on the Application of Recycled Filler of Waste Clay Brick in Municipal Road Construction(HU Yan-kai)
- 86** Calculation and Analysis of Bailey Beam + Steel Bracket of Viaduct Girder(DANG Hu-feng, LIANG Xue-bing)
- 90** Study on Combined Turnout Design of Existing Metro Line Through Reconstruction Project(SUN Li-juan)
- 93** Study on the Optimal Design of Curved Steel Box Girder Bridge (LI Shuang)
- 97** Research on the Location and Structural Reasonable Section for the Equipment Expansion in Subway Station(CHU Yue-hua)
- 100** Causes and Control Measures of Cracks in Bridge Engineering(HUANG Zhao)
- 103** Research on Municipal Road Drainage Design Based on Sponge City Concept(HU Ya-ping, XU Chen-yang)
- 106** Study on Ventilation Technology of Extra-Long Tunnel(CHEN Qian)
- 109** Research on the Development of Green Ecological Highway Construction System Based on the Background of Green Development(WANG Hua-feng, WANG Yong, HUANG Ruo-nan, SHI Kai, YANG Zi-hao)
- 113** Study on the Influence of Poor Soil Environment on Pavement Performance(HOU Lei-qiang)
- 116** Analysis of Health Monitoring Data of 65 m Tied Arch Bridge (LI Gui-xiang, DU Shi-kang)
- 120** Characteristic Analysis of Silt in Municipal Drainage Pipeline and Discussion on Cleaning Methods(ZHAO Hong-lei)
- 123** Research on Urban Road Plant Landscape Greening Design Under the Concept of Low Carbon(XIA Xin-yuan, XU He, XIE Qing-long)



- 126 Research on Landscape Architecture from the Perspective of Public Health(GUO Ge)
- 129 Research on Section Deformation of Shield Tunnel Based on RANSAC-LSM Fitting Model(JIA Shi-jie)
- 132 Load Test Analysis of Steel Truss Bridge(YAO Jia-li, CHEN Ke, OUYANG Wen)
- 137 Research on Weighing Technology of High Speed Railway Swivel T-Shape Rigid Bridge(LI Jia-hao, YUAN Shuai-hua)

Environment Engineering Design

- 140 The Application of Anammox Technology for High Ammonia Nitrogen Wastewater in Photovoltaic Wastewater Treatment (LIU Yun-zhou, WANG Yan)
- 143 Case Analysis of Water Environment Treatment in River Network Area(LI Zhi-cheng, CHENG Shu-hui, LI Ling-zhen, QIAO Xin, GUO Xin-yu, KOU Xiao-xia)

Intelligentize and Informatization

- 146 Advances in the Application of Computer Vision in the Rapid Localization of Pipe Network Defects(WANG Xiao, GUO Jian-qiao, YANG Xin, LI Jie, LIU Zhi-xiang, ZHANG Qiang)
- 150 Application of BIM in Visualization of Construction Process of High-Speed Railway Continuous Beam Bridge(WU Dian-chao, ZHENG Yu, PAN Yan-chao)

Construction Technology

- 153 Discussion on Construction Technology of 20 kV Power System of High-Speed Railway(SUN Ji, KONG Xiang-jie, ZHANG Jun-qiang)
- 156 Construction Technology of Pile Foundation of Pile-Plate Type Soilless Subgrade(LING Han-qing, RUAN Mao-qing, WANG Sheng-yu)
- 159 Research on Staged Pouring Technology of Elevated Piers in Complex Urban Environment and Large Traffic Volume (YANG Wei-jun, JIN Wen-hua, NI Wen-xiang, ZHANG Zheng-wei, HUANG Wen-ming)
- 162 Key Technology and Construction of Suspender Replacement for Three Span Through Concrete Filled Steel Tubular Arch Bridge(JIANG Xin)
- 166 Construction Analysis of Steel Sheet Pile Cofferdam Cap for Underwater Pier of River Bridge(CAI Ming-zhi)
- 169 Application of Precast Staircase in High Building Engineering(OUYANG Wen-le)
- 172 Research on the Application Status and Development of Horizontal Directional Drilling Across the River Technology(BA Wan-ming)
- 175 Analysis of Highway Bridge Reinforcement Construction Technology——Taking the Grouting Technique as an Example (LIU Qiang)
- 178 Application of Comprehensive Investigation Technology in Geotechnical Engineering Investigation(FAN Jian-min)
- 181 Research on Construction Technology of Low Fill and Shallow Excavation Subgrade in Highway Construction(LIU Zeng)
- 184 Application Analysis of Soft Soil Foundation Construction Technology in Highway Bridge Construction(LI Rui-qian)
- 187 Research on Subbed Settlement and Construction Control Technology of Expressway(XU Ren)

- 190 Construction Technology of Polyester Fiber Modified Asphalt Pavement in Highway Engineering(WANG Ying)
- 193 Application of Grouting Reinforcement Treatment Technology in Subgrade Construction of Expressway(HUANG Hai)
- 196 Application of Post Cast Strip Beam and Slab Construction Technology Supported by Concrete Column(ZOU Peng-wei, MENG Shan, LIU Bin, YE Chang-hong, DAI Jing-qi)
- 199 Research on Construction Technology and Quality Control of Asphalt Pavement(GAO Gang)
- 202 Research on the Key Technology of Quality Control of High-Rise Building Construction(YANG Ming-xu)
- 206 Research on the Crack Control of Super-Span Reinforced Concrete Frame Structures(JIAN Ting-xin, HUANG He, FENG Yan-bo, XU Zheng)
- 209 Research on Geotechnical Engineering Geological Exploration Technology and Quality Control(HU Yue-kai, JIANG Liang, CUI Jia-rui, LV Ze-yang, CHEN He-xi)
- 212 Review on the Precast Concrete Sandwich Panels(WANG Ya-xian, YI Guo-hui, QIN Chang-an, ZHANG Guo-wei)
- 217 Safety Prevention and Control of Coal Storage Silo Maintenance Test Project(SUN Ding-liang)

Project Management

- 221 Thoughts and Suggestions on Relocation and Construction of Equipment Manufacturing Enterprises(GAO Ye-jian)
- 224 Preliminary Discussion on the Prominent Problems and Countermeasures in PPP Projects of Village and Town Sewage Treatment(WANG Chao, YANG Jun-wei, LIU Xue-song, ZHU Chang-xin)
- 227 Discussion on Management Key Points of Consortium Joint Venture(WANG Wei-xiang, SUN Chang-jiang, LI Rui, YUAN Shu)
- 230 Discussion on the Treatment of Design Deviation of Construction(ZHAO Kun)
- 233 Analysis on the Whole Process Cost Management of Municipal Construction Enterprises(LEI Sheng)
- 236 Control Measures of New Energy Power Engineering Cost (XIAO Yu-qi)
- 239 Research on Standardized Management and Remediation Technology of Lining Defects in High-Speed Railway Tunnel Under EPC Mode(SUN Chang-sheng)
- 242 Discussion on the Key Points of Municipal Engineering Construction Management and the Countermeasures to Improve the Management System(TANG Xue-yun)
- 245 Study on Influencing Factors and Control Strategies of Highway Engineering Cost Management(XU Jia-qiang)
- 248 Brief Discussion on the Information Management of Highway Engineering Test and Detection(LIU Mou-zhi)
- 251 Investigation and Analysis of Aggregate Green Supply Chain (GUO Cong)



中国中元国际工程有限公司

CHINA IPPR INTERNATIONAL ENGINEERING CO.,LTD.



地址：北京市西三环北路5号 邮编：100089 电话：(010) 68458355 传真：(010) 68732688 网址：<http://www.ippr.com.cn> 邮箱：office@ippr.net

标准刊号：ISSN1007-9467 广告许可证号：京海工商广字第 8214 号 邮发代号：82-847 定价：20.00 元 / 期 480.00 元 / 年
CN11-3914/TU