

## 目 次

### 桥梁与结构工程

- 下承式密布横梁体系钢桁结合梁桥受力性能分析 ..... 肖 鑫 刘晓光 赵欣欣 等( 1 )
- 曲率半径对曲线斜拉桥力学性能的影响分析 ..... 任建新 单德山 张二华 等( 7 )
- 高速铁路大型桥梁养护维修 PHM 系统应用初探 ..... 杨怀志( 12 )
- 神朔铁路曲线桥梁偏心超限整治模型研究 ..... 李 军 秦宪国 安 茹 等( 17 )
- 大跨度连续箱梁桥挠度敏感性分析 ..... 刘菊玖 姜天华 杨 壮( 21 )
- 钢板加固简支梁桥静载试验研究 ..... 傅光奇 吕 梁 贾 毅 等( 24 )
- 不对称 U 型梁空间仿真分析 ..... 蒋海军 张 磊 段增强 等( 28 )
- 大吨位先张预应力 U 型梁建造关键技术研究 ..... 徐 闯( 32 )
- 铁路桥梁支座防腐耐候性影响因素分析及强化措施研究 ..... 佟嘉明 臧晓秋 石秋君( 36 )
- 多跨连续梁桥的隔震方案研究 ..... 邱新林 廖 平 赵人达 等( 41 )
- 武汉市姑嫂树路跨铁路立交桥高位转体施工技术 ..... 高庚元( 44 )
- 偏载状态下的桥梁转体球铰性能分析 ..... 宋建平 王 勇 姜文英( 49 )
- 高速铁路大风地区挡风结构破坏性试验研究 ..... 吴 炜( 53 )

### 隧道与地下工程

- 高速铁路隧道结构状态模糊评价方法研究 ..... 王志伟 马伟斌 赵有明 等( 58 )
- 隧道衬砌背后空洞上方落石对衬砌结构的破坏机理及整治措施 ..... 张良山( 63 )
- 反应位移法和地震系数法在地铁隧道抗震中的对比分析 ..... 杨瑞军 刘世忠 成 昭( 68 )
- 砂卵石地层盾构隧道施工地表沉降槽宽度系数分析 ..... 周 帅 龙 杰( 73 )

富水粉细砂地层下穿既有铁路顶管隧道设计与施工 .....	田 鹏( 77 )
湿喷混凝土技术在六盘山隧道的应用研究 .....	颜海建( 81 )
浅埋隧道下穿钱塘江输水渠加固和保护技术 .....	郭银波( 85 )
基坑爆破开挖对运营隧道的影响数值模拟分析 .....	孙崔源 薛 里 刘世波 等( 89 )
河漫滩地区地铁车站深基坑变形规律 .....	董 嘉 崔 雍( 92 )
隔离桩桩径对基坑开挖引起既有地铁隧道位移的影响 .....	曾晓鑫 丁文湘 彭 玲 等( 95 )

## 路基与地基基础

挡土墙填充缓冲层前后土压力变化规律试验研究 .....	潘诗婷 兰 鹏 刘小文 等( 98 )
基于离散元方法的落石冲击力变化规律研究 .....	王林峰 姚昌银 邹 政 等( 101 )
戈壁土地基的变形影响因素研究 .....	薛 晖( 106 )
荷载作用下桩间相互作用系数计算分析 .....	侯思强 郭院成 李明宇 等( 110 )

## 线路与养护维修

赣龙线高速铁路综合试验技术 .....	白 鑫 林 维 熊小慧( 115 )
减振型板式轨道动力特性试验研究 .....	刘伟斌 江 成 王继军 等( 121 )
无砟轨道线路维护中与温度力相关的问题及对策 .....	刘丙强( 125 )
基于双谱的重载铁路道岔钢轨折断及伤损监测系统 .....	王金虎( 130 )
有理数阶微分在轨道板裂缝检测系统中的应用 .....	洪晓江( 135 )
黎湛线电气化改造时钢轨打磨模式的优化与应用 .....	罗志庭( 140 )

## 工程材料及其他

定量与定性评估在轨道工程建设危险源识别中的应用 .....	于 鑫( 143 )
降雨入渗条件下弃渣场边坡稳定性分析 .....	王光辉( 147 )

# CONTENTS

## Bridge and Structural Engineering

Mechanical Behavior Analysis for Through Bridge of Steel Truss Composite Girder with Multi-transverse Beams System .....	XIAO Xin, et al( 1 )
Influence of Curvature Radius on Mechanical Performance of Curved Cable-stayed Bridge .....	REN Jianxin, et al( 7 )
Elementary Discussion on Application of PHM System for Maintenance and Repair in Large Bridges of High Speed Railway .....	YANG Huaizhi( 12 )
Research on Treatment Model of Over-stand Eccentricity Curve Bridge on Shenmu-Shouzhou Railway .....	LI Jun, et al( 17 )
Analysis on Deflection Sensibility of Large-span Continuous Box Girder Bridge .....	LIU Jujiu, et al( 21 )
Study on Static Load Test of Simply-supported Girder Bridge Reinforced by Steel Plates .....	FU Guangqi, et al( 24 )
Space Simulation Analysis on Asymmetry U-shaped Girder .....	JIANG Haijun, et al( 28 )
Study on Key Construction Technology of Large Tonnage Pretensioning Prestressed U-shaped Girder .....	XU Chuang( 32 )
Analysis on Influential Factors of Corrosion Resistance and Weatherability of Railway Bridge Bearing and Strengthening Measure Study .....	TONG Jiaming, et al( 36 )
Study on Seismic Isolation Schemes of Multi-span Continuous Girder Bridge .....	QIU Xinlin, et al( 41 )
High Rotation Construction Technology of Overpass Bridge Across Railway on Gusaoshu Road in Wuhan .....	GAO Gengyuan( 44 )
Analysis of Spherical Hinge Performance in Rotation of Bridge Under Eccentric Load .....	SONG Jianping, et al( 49 )
Destructive Test Study of Wind-break Structure Along High Speed Railway in Gale Area .....	WU Wei( 53 )

## Tunnel and Underground Works

Study on Fuzzy Evaluation Method for Structural State of High Speed Railway Tunnel .....	WANG Zhiwei, et al( 58 )
Study on Failure Mechanism and Renovation Measures of Lining Structure Influenced by Falling Rocks Above Cavity Behind the Tunnel Lining .....	ZHANG Liangshan( 63 )
Comparison Analysis Between Response Displacement Method and Seismic Coefficient Method Used in Calculation of Seismic Response of Metro Tunnels .....	YANG Ruijun, et al( 68 )
Analysis on Width Coefficient of Ground Surface Settlement Trough Caused by Shield-driven Tunnel in Sandy Cobble Stratum .....	ZHOU Shuai, et al( 73 )

Design and Construction for Pipe-jacking Tunnel Under Existing Railway in Water-rich	
Silty Sand Stratum .....	<i>TIAN Peng</i> ( 77 )
Application of Wet Shotcrete Technology in Liupanshan Tunnel .....	<i>YAN Haijian</i> ( 81 )
Reinforcement and Protection Technique of Shallow Buried Tunnel Crossing Underneath	
Qiantangjiang Conveyance Canal .....	<i>GUO Yinbo</i> ( 85 )
Numerical Simulation Analysis on Influence of Foundation Pit Blasting Excavation on	
Operating Tunnel .....	<i>SUN Cuiyuan, et al</i> ( 89 )
Deformation Law of Deep Foundation Pit for Metro Station in Flood Plain Area .....	<i>DONG Jia, et al</i> ( 92 )
Influence of Isolation Pile Diameter on Existing Metro Tunnel Displacement Caused by	
Excavation of Foundation Pit .....	<i>ZENG Xiaoxin, et al</i> ( 95 )

## Subgrade • Foundation

Experimental Study on Earth Pressure Change Laws Before and After	
Filling Retaining Wall with Buffer Layers .....	<i>PAN Shiting, et al</i> ( 98 )
Study on Change Law of Rockfall Impact Force Based on Discrete Element Method .....	<i>WANG Linfeng, et al</i> ( 101 )
Study on Influence Factors of Gobi Subsoil Deformation .....	<i>XUE Hui</i> ( 106 )
Calculation Analysis of Interaction Coefficients Between Piles Under Load .....	<i>HOU Siqiang, et al</i> ( 110 )

## Track and Its Maintenance

Comprehensive Test Technique for High Speed Railway on Ganzhou-Longyan Railway .....	<i>BAI Xin, et al</i> ( 115 )
Experimental Study on Dynamic Characteristics of Vibration Attenuation Type Slab Track	
.....	<i>LIU Weibin, et al</i> ( 121 )
Problems and Countermeasures of the Temperature Force During	
Ballastless Track Maintenance .....	<i>LIU Bingqiang</i> ( 125 )
Monitoring System for Rail Fracture and Damage of Heavy Haul Railway Turnout	
Based on Bispectrum .....	<i>WANG Jinhu</i> ( 130 )
Application of Rational Order Differential in Crack Detection System for Track Slab .....	<i>HONG Xiaojiang</i> ( 135 )
Optimization and Application of Rail Grinding Mode During Litang-Zhanjiang Railway	
Electrification Reconstruction .....	<i>LUO Zhiting</i> ( 140 )

## Engineering Material and Others

Application of Quantitative and Qualitative Assessment in Risk Sources Identification of	
Railway Engineering Construction .....	<i>YU Xin</i> ( 143 )
Slope Stability Analysis for Slap Dump Under Rainfall Infiltration Condition .....	<i>WANG Guanghui</i> ( 147 )