

《中国学术期刊（光盘版）》入编期刊
《中国期刊网》上网期刊
中国期刊全文数据库(CJFD)全文收录期刊
《中国学术期刊综合评价数据库》来源期刊

ISSN 1006-3951
CN 53-1112/TK



云南水力发电

YUNNAN SHUILI FADIAN

YUNNAN WATER POWER



中老铁路项目孟卡西楠里河特大桥

ISSN 1006-3951



9 771006 395209

云南省水力发电工程学会

9
2020

目 次

能源、移民与环境

- 河道底泥堆放场场地环保防护研究..... 宾红军, 张仲伟 (6)
老旧城中村的雨污系统整治..... 朱仁杰, 彭喜军, 马向利, 杨杰 (10)
智能化泵井在城中村内涝中的应用..... 乔磊, 刘常青, 施卓昕 (13)
农村生活污水 COD 浓度提升方案研究 耶律根迪, 张志勇 (16)
城市化粪池粪渣处理技术与社会效益..... 张青龙, 孔德浩 (20)
广州南沙大岗镇农村生活污水处理工艺方案比选..... 耶律根迪, 孙丕晏 (23)
基于邻近差异分析的风速仪故障诊断..... 魏敏, 陈克锐, 刘军, 艾勇, 马兴义 (27)
某畜牧养殖基地地下水水源取水水源论证..... 郭波 (31)

设计与施工技术

- 黄竹林 2 号隧道二衬混凝土带模注浆施工技术应用..... 谢海林, 杨文庆 (34)
市政污水管道工程常见质量通病及其防治措施..... 张明方 (38)
山区悬崖高边坡石方爆破施工技术..... 沈国成, 李骥, 朱平, 刘晓圆 (41)
东莞市石马河流域清溪镇排口治理技术..... 杨瑞莲, 陈石春, 梁俊涛 (44)
二级公路路基施工常见问题与对策..... 严国正, 陈伟 (49)
石马河流域综合治理项目清溪河道治理实施规划..... 王建国, 杜志飞, 陈石春 (51)
东莞市石马河流域清溪镇龙眼坑水综合治理施工技术..... 王建国, 杜志飞, 陈石春 (55)
非开挖技术在排水管道修复工程中的应用..... 张明方 (60)
论钻孔桩的质量缺陷处理..... 晁海涛 (65)
铁路隧道水沟电缆槽渗水原因及预防治理措施..... 储茂成 (69)
铁路路堑边坡滑坡的成因分析和治理..... 杨国忠, 杜立, 党超凡 (74)
污水管网缺陷管段的非开挖修复施工技术..... 蒋稳坤, 马向利, 杨杰, 陈大俊 (77)
水环境整治工程中大型沉井施工的质量控制..... 刘修荣, 倪明辉, 翁光来, 罗正峰 (80)
郊区农村生活污水地下管网施工中管线保护措施..... 谢鸭伟, 江涛, 申海洋 (84)
河涌景观施工质量控制..... 边俊超, 李泽, 刘福贵 (88)
路基高边坡抗滑桩施工技术及管理..... 谢海林, 杨文庆 (92)
定型钢模板在五期管网项目顶管施工中的应用..... 张磊, 余江 (96)
高强度深厚基岩地铁车站咬合桩工法比选..... 赵康康, 周石喜, 倪耀文, 罗庆斐 (98)
深基坑爆破开挖防护技术研究..... 贺群英, 景勇 (102)
高强度复合地层地铁车站咬合桩施工新技术..... 惠世前, 饶彩琴, 江峰, 赵康康 (105)
钢丝牵引叠梁阀式截流井的优点..... 江涛, 冯时, 李嘉祺 (109)
关于桥梁施工中悬臂挂篮技术的应用..... 朱家茂, 申海洋, 冯时 (111)
复杂地质长大隧道快速施工技术研究..... 陈家湘, 胡金欣, 余灿 (113)
地铁车站基坑内预留桥桩比选方案分析及实践..... 贺群英 (117)
复杂场地条件下大管径顶管施工技术研究..... 朱仁杰, 彭喜军, 刘加龙, 杨杰 (122)
城市片区复杂环境顶管工程沉井施工技术..... 李雷, 梁子潇, 廖志兴 (127)
门机吊轨道施工中的测量控制方法..... 赵兴强, 杨凯, 虎江华 (131)
钢模台车堵头模施工方法在矿山法隧道中应用..... 张强强, 陈思诚, 陈翕和, 杨凯 (134)
地下综合管廊细部构造防水施工技术应用..... 李卫平, 朱义龙, 邓远见 (136)
SMW 工法桩施工技术 李卫平, 朱义龙, 邓远见 (140)
河道初雨截流管渗漏处理技术..... 郭福, 宾红军 (144)
高海拔地区超长隧洞小断面施工通风技术..... 朱家俊, 左朋, 段景尧, 史楠 (147)
滇池湖相沉积区地铁联络通道冷冻法施工技术..... 史楠, 左朋, 王黎钧, 朱家俊, 段景尧 (150)
地铁车站跨基坑大管径污水管悬吊保护施工技术..... 朱家俊, 刘坤, 杨国源, 陈云 (153)

两井定向在地铁盾构法施工中的应用	姚江, 朱家俊, 史楠	(156)
富水软弱地层“超前加固、填舱换刀”技术	王创元	(159)
水体生态修复技术在黑臭河道治理中的应用	张应盛, 谢雨奇, 刘宗, 陶帅	(163)
全回收复合悬臂桩围堰在感潮河道中的创新与应用	王继奎, 高志鑫	(165)
盖挖逆筑法施工永久钢管柱分节安装技术	廖志兴, 梁子潇, 张大鹏, 王元飞	(169)
弱膨胀性土质高边坡路基施工技术	胡金欣, 陈家湘, 余灿	(172)
铁路路桥过渡段沉降差施工控制措施	杜立	(176)
公路工程 GPS 静态控制测量技术	柏兴洋, 孔德浩	(178)
地下厂房岩壁吊车梁岩台成型保护技术	董春芳	(182)
磨万铁路路基高压旋喷桩施工技术	樊雪飞, 方文忠, 范入之, 张成俊	(185)
中老铁路长隧洞围岩突变处理施工技术	樊雪飞, 张成俊, 钱月恒, 方文忠	(187)
盾构机在带砂层的复合地层带压开仓技术	林超	(189)
感潮河段钢板桩 + 膜袋复合围堰技术要点	周科成, 陈愿, 张涛	(193)
城中村污水治理工程施工难点及应对措施	赖康铭, 刘帅, 李健圣	(197)
网络 RTK 技术在城市工程测量中的应用	张磊, 徐聪, 刘娇	(200)
铁路桥梁深水基础钢板桩围堰施工技术	谢海林, 胡华分	(202)
云鹏水电站心墙堆石坝设计与实践	李世杰, 艾海峰	(208)
房屋建筑详细勘察中钻孔孔深的确定	郭波	(215)

试验研究与监测

低坝坝基岩体抗剪强度参数确定方法研究	彭森良, 李忠, 王文远, 王凯	(218)
不同级配及组合骨料的混凝土配合比研究及工程应用	董海英, 叶新	(225)
独塔密索体系双索面斜拉桥荷载试验检测分析	卢的, 黄人峰, 邱建华	(229)

工程建设及管理

玻利维亚圣何塞水电站远程互控研究	王录永	(233)
中国水电工程勘测设计业务“走出去”现状分析	牛松涛, 彭森良	(237)
铁路工程隧道施工超挖超填及超喷项目管控措施	权力, 冉君	(241)
农民工“实名制”对建筑企业的影响	张新, 李杰义, 陈伟, 禹传家	(245)
“互联网+”反腐倡廉新模式在企业反腐倡廉工作中的运用	张鹏, 管育超	(247)
三维激光扫描技术在暗涵排查中的应用	蒋稳坤, 杨晓鸿, 谭允允, 杨杰	(250)
分散式污水处理设施在城市污水处理工程中的应用	杨光武, 余江, 张磊	(253)
基于 Vissim 仿真的交通疏解方案评价分析	周跃飞, 赵康康, 倪耀文, 马克乾	(256)
论铁路声屏障现存主要问题	杜立	(260)
市政给排水管道工程施工风险与管理	陶帅, 谢雨奇	(263)
建筑施工安全事故成因与预防分析	方瀚卿	(266)

简讯: 云南省能监办到澜沧江上游水电站项目部工区检查指导工作 (15) “十三五”以来云南西电东送电量突破 $6000 \times 10^8 \text{ kW} \cdot \text{h}$ 超此前 23a 送电量总和 (26) 金沙江上游拉哇水电站最长交通隧洞全线贯通 (30) 乌东德大坝: 精品工程背后的质量故事 (一) (33) 乌东德大坝: 精品工程背后的质量故事 (二) (64) 乌东德大坝: 精品工程背后的质量故事 (三) (73) 乌东德大坝: 精品工程背后的质量故事 (四) (87) 云南省小水电将按计划于 2020 年底完成年度整改任务 (158) 白鹤滩弃水难题将被破解 (199) 乌东德水电站第二批机组启动试运行获批 (207) 南方电网前三季度水电清洁能源基本全额消纳 (214) “镜面混凝土”完工——白鹤滩水电站泄洪洞龙落尾段完美收官 (236) 张宗亮荣获何梁何利基金科学与技术创新奖 (244) 乌东德水电站 11 号机组进入核心主机安装阶段 (249) 习近平在全面推动长江经济带发展座谈会上强调贯彻落实党的十九届五中全会精神 推动长江经济带高质量发展韩正出席并讲话 (一) (255) 习近平在全面推动长江经济带发展座谈会上强调贯彻落实党的十九届五中全会精神 推动长江经济带高质量发展韩正出席并讲话 (二) (262) 习近平在全面推动长江经济带发展座谈会上强调贯彻落实党的十九届五中全会精神 推动长江经济带高质量发展韩正出席并讲话 (三) (265) 习近平在全面推动长江经济带发展座谈会上强调贯彻落实党的十九届五中全会精神 推动长江经济带高质量发展韩正出席并讲话 (四) (268)

封面: 中老铁路项目孟卡西楠里河特大桥

中国水利水电第十四工程局有限公司轨道工程事业部/供稿

Contents

Energy, Migration and Environment

Research on Environmental Protection of River Sediment Stacking Site	BING Hong-jun, ZHANG Zhong-wei (6)
Remediation of Rain and Pollution System in Old Town Village	ZHU Ren-jie, PENG Xi-jun, MA Xiang-li, YANG Jie (10)
Application of Intelligent Pump Well in Urban Village Waterlogging	QIAO Lei, LIU Chang-qing, SHI Zhuo-xin (13)
Study on Scheme of Increasing COD Concentration of Rural Sewage	YELV Gen-di, ZHANG Zhi-yong (16)
Treatment Technology and Social Benefits of Urbanized Sewage Residue	ZHANG Qing-long, KONG De-hao (20)
Comparison and Selection of Rural Sewage Treatment Process Schemes in Dagang Town, Nansha, Guangzhou	YELV Gen-di, SUN Pi-yan (23)
Fault Diagnosis of Anemometer Based on Neighborhood Difference Analysis	WEI Min, CHEN Ke-rui, LIU Jun, AI Yong, MA Xing-yi (27)
Demonstration of Groundwater Resources and Intake Water Source in a Livestock Breeding Base	GUO Bo (31)

Energy, Migration and Environment

Construction Technology Application of Forming Grouting for Second Lining Concrete Belt of Huangzhulin No.2 Tunnel	XIE Hai-lin, YANG Wen-qing (34)
Common Quality Defects and Preventive Measures of Municipal Sewage Pipeline Project	ZHANG Ming-fang (38)
Construction Technology of Rock Blasting for Cliff High Slope in Mountainous Area	SHEN Guo-cheng, LI Ji, ZHU Ping, LIU Xiao-yuan (41)
Discharge Treatment Technology of Qingxi Town in Shima River Basin of Dongguan City	YANG Rui-lian, CHEN Shi-chun, LIANG Jun-tao (44)
Common Problems and Countermeasures of Subgrade Construction of Secondary Highway	YAN Guo-zheng, CHEN Wei (49)
Implementation Planning of Qingxi River Management Project for Comprehensive Management of Shima River Basin	WANG Jian-guo, DU Zhi-fei, CHEN Shi-chun (51)
Construction Technology for Comprehensive Treatment of Longyankeng Water in Qingxi Town of Shima River Basin, Dongguan City	WANG Jian-guo, DU Zhi-fei, CHEN Shi-chun (55)
Application of Unexcavated Technology in Drainage Pipe Repair Project	ZHANG Ming-fang (60)
Treatment of Quality Defects of Bored Piles	CHAO Hai-tao (65)
Causes of Seepage in Cable Channel of Railway Tunnel and Preventive Measures	CHU Mao-cheng (69)
Causes Analysis and Treatment of Landslide on Railway Cutting Slope	YANG Guo-zhong, DU Li, DANG Chao-fan (74)
Construction Technology of Non-Excavation Repair for Defective Section of Sewage Pipe Network	JIANG Wen-kun, MA Xiang-li, YANG Jie, CHEN Da-jun (77)
Quality Control of Large Sinking Shaft Construction in Water Environment Regulation Project	LIU Xiu-rong, NI Ming-hui, WENG Guang-lai, LUO Zheng-feng (80)
Pipeline Protection Measures in Construction of Underground Sewage Pipeline in Rural Areas of Suburbs	XIE Ya-wei, JIANG Tao, SHEN Hai-yang (84)
Quality Control of River Landscape Construction	BIAN Jun-chao, LI Ze, LIU Fu-gui (88)
Construction Technology and Management of Anti-slide Piles on High Side Slope of Subgrade	XIE Hai-lin, YANG Wen-qing (92)
Application of Profiled Steel Formwork in Jacking Pipe Construction of Phase V Pipe Network Project	ZHANG Lei, YU Jiang (96)
Comparison and Selection of Construction Methods for Binding Piles in High Strength and Thick Bedrock Subway Station	ZHAO Kang-kang, ZHOU Shi-xi, NI Yao-wen, LUO Qing-fei (98)
Research on Protection Technology for Blasting Excavation of Deep Foundation Pit	HE Qun-ying, JING Yong (102)
New Construction Technology of Binding Pile for Metro Station in High-strength Composite Stratum	HUI Shi-qian, RAO Cai-qin, JIANG Feng, ZHAO Kang-kang (105)
Advantages of Steel Wire Towed Folded Beam Valve Shutoff Well	JIANG Tao, FENG Shi, LI Jia-qi (109)
Application of Cantilever Hanger Technology in Bridge Construction	ZHU Jia-mao, SHEN Hai-yang, FENG Shi (111)
Research on Rapid Construction Technology of Long Tunnel in Complex Geology	CHEN Jia-xiang, HU Jin-xin, YU Can (113)
Analysis and Practice on Comparison and Selection of Prepared Bridge Piles in Foundation Pit of Metro Station	HE Qun-ying (117)
Research on Construction Technology of Large Diameter Pipe Jacking under Complex Site Conditions	ZHU Ren-jie, PENG Xi-jun, LIU Jia-long, YANG Jie (122)
Construction Technology of Caisson for Pipe Jacking in Complex Environment in Urban Area	LI Lei, LIANG Zi-xiao, LIAO Zhi-xing (127)
Measurement and Control Method in Construction of Gantry Crane Crane Track	ZHAO Xing-qiang, YANG Kai, HU Jiang-hua (131)
Application of Steel Form Trolley Plug Form Construction Method in Mining Tunnel	ZHANG Qiang-qiang, CHEN Si-cheng, CHEN Yin-he, YANG Kai (134)

Application of Waterproofing Construction Technology for Details Structure of Underground Comprehensive Pipe Gallery.....	LI Wei-ping, ZHU Yi-long, DENG Yuan-jian (136)
SMW Construction Method Pile Construction Technology	LI Wei-ping, ZHU Yi-long, DENG Yuan-jian (140)
Leakage Treatment Technology of River Channel Primary Rain Interception Pipe	GUO Fu, BIN Hong-jun (144)
Ventilation Technology for Small Section Construction of Super Long Tunnel in High Altitude Area	ZHU Jia-jun, ZUO Peng, DUAN Jing-yao, SHI Nan (147)
Construction Technology of Metro Connection Passage Freezing in Dianchi Lake Deposition Area	SHI Nan, ZUO Peng, WANG Li-jun, ZHU Jia-jun, DUAN Jing-yao (150)
Construction Technology for Suspension Protection of Large Diameter Sewage Pipe Crossing Foundation Pit in Metro Station	ZHU Jia-jun, LIU Kun, YANG Guo-yuan, CHEN Yun (153)
Application of Two-well Orientation in Construction of Subway Shield Tunneling	YAO Jiang, ZHU Jia-jun, SHI Nan (156)
“Advance Reinforcement, Tank Filling and Tool Changing” Technology in Water-Rich Weak Strata	WANG Chuang-yuan (159)
Application of Water Ecology Rehabilitation Technology in Treatment of Black and Odor River	ZHANG Ying-sheng, XIE Yu-qí, LIU Zong, TAO Shuai (163)
Innovation and Application of Fully Recovered Composite Cantilever Pile Cofferdam in Tidal River	WANG Ji-kui, GAO Zhi-xin (165)
Sectional Installation Technology of Permanent Steel Pipe Column by Cover Digging and Inversion Construction	LIAO Zhi-xing, LIANG Zi-xiao, ZHANG Da-peng, WANG Yuan-fei (169)
Construction Technology of Roadbed on Weak Expansive Soil High Slope	HU Jin-xin, CHEN Jia-xiang, YU Can (172)
Construction Control Measures for Differential Settlement of Railway-Road-Bridge Transition Section	DU Li (176)
GPS Static Control Surveying Technology for Highway Engineering	BAI Xing-yang, KONG De-hao (178)
Forming Protection Technology of Rock Wall Crane Beam Rock Platform of Underground Power House	DONG Chun-fang (182)
Construction Technology of High Pressure Jet Grouting Pile for Mowan Railway Subgrade	FAN Xue-Fei, FANG Wen-zhong, FAN Ru-zhi, ZHANG Cheng-jun (185)
Construction Technology for Surrounding Rock Catastrophic Treatment of Long Tunnel of Middle-old fellow Railway	FAN Xue-Fei, ZHANG Cheng-jun, QIAN Yue-heng, FANG Wen-zhong (187)
Shield Machine Opening Technology with Pressure in Composite Formation with Sand Bed	LIN Chao (189)
Technical Essentials of Steel Sheet Pile and Membrane Bag Composite Cofferdam in Tidal Reach	ZHOU Ke-cheng, CHEN Yuan, ZHANG Tao (193)
Difficulties in Construction of Sewage Treatment Project in Urban Village and Corresponding Measures	LAI Kang-ming, LIU Shuai, LI Jian-sheng (197)
Application of Network RTK Technology in Urban Engineering Survey	ZHANG Lei, XU Cong, LIU Jiao (200)
Construction Technology of Steel Sheet Pile Cofferdam for Deep Water Foundation of Railway Bridge	XIE Hai-lin, HU Hua-fen (202)
Design and Practice of Core Rockfill Dam of Yunpeng Hydropower Station	LI Shi-jie, AI Hai-feng (208)
Determination of Drill Hole Depth in Detail Investigation of Housing Building	GUO Bo (215)

Test Research and Monitoring

Study on Determination Method of Shear Strength Parameters of Low Dam Foundation Rock Mass	PENG Sen-liang, LI Zhong, WANG Wen-yuan, WANG Kai (218)
Study and Engineering Application on Concrete Mix Proportion of Different Gradation and Combination Aggregate	DONG Hai-ying, YE Xin (225)
Load Test and Analysis of Double Cable Plane Cable Stayed Bridge with Single Tower and Dense Cable System	LU Di, HUANG Ren-feng, QIU Jian-hua (229)

Engineering Construction and Management

Research on Remote Intercontrol of San Jose Hydropower Station in Bolivia	WANG Lu-yong (233)
Current Situation Analysis of “Going Out” of Hydroelectric Engineering Survey and Design Business in China	NIU Song-tao, PENG Sen-liang (237)
Management and Control Measures for Over-excavation, Over-filling and Over-spraying of Railway Tunnel Construction	QUAN Li, RAN Jun (241)
Impact of Real Name System of Migrant Workers on Construction Enterprises	ZHANG Xin, LI Jie-yi, CHEN Wei, YU Chuan-jia (245)
Application of New Model of “Internet+” in Enterprise Anti-Corruption and Corruption Promotion	ZHANG Peng, GUAN Yu-chao (247)
Application of Three-dimensional Laser Scanning Technology in Dark Culvert Investigation	JIANG Wen-kun, YANG Xiao-hong, TAN Yun-yun, YANG Jie (250)
Application of Dispersed Sewage Treatment Facility in Urban Sewage Treatment Project	YABG Guang-wu, YU Jiang, ZHANG Lei (253)
Evaluation and Analysis of Traffic Evacuation Scheme based on Vissim Simulation	ZHOU Yue-fei, ZHAO Kang-kang, NI Yao-wen, MA Ke-qian (256)
Main Existing Problems of Railway Sound Barrier	DU Li (260)
Construction Risk and Management of Municipal Water Supply and Drainage Pipeline Project	TAO Shuai, XIE Yu-qí (263)
Causes and Preventive Analysis of Safety Accidents in Construction	FANG Han-qing (266)