

SICHUAN WATER RESOURCES

2023.1

双月刊 总第257期

四川水利

主管/主办：四川省水利科学研究院

ISSN 2095-1809 CN51-1155/TV

《中国核心期刊（遴选）数据库》收录期刊
《中文科技期刊数据库》收录期刊
《中国期刊全文数据库（CJFD）》收录期刊
《中国学术期刊网络出版总库》收录期刊
《中国学术期刊（光盘版）》入编期刊
《万方数据——数字化期刊群》入网期刊



绵阳湍江云栖逸境水利风景区

四川水利

(双月刊)

2023年

第1期

(第44卷, 总第257期)

2023年2月出版

(1978年创刊)

《中国核心期刊(遴选)数据库》收录期刊
《中文科技期刊数据库》收录期刊
《中国期刊全文数据库(CJFD)》收录期刊
《中国学术期刊网络出版总库》收录期刊
《中国学术期刊(光盘版)》入编期刊
《万方数据——数字化期刊群》入网期刊

主管办 四川省水利科学研究院

协办 四川水利职业技术学院

编辑出版 《四川水利》编辑部
成都市青羊区牧电路7号

刊名题字 敬正书

主 编 刘双美 张智涌

副 主 编 罗茂盛 郭翔宇 卢喜平
杨绍平

责任编辑 来晓芸 王 中 冯朝俊
曾云峰

发 行 四川省水利科学研究院

地 址 成都市青羊区牧电路7号

邮政编码 610072

电 话 (028) 87363803

传 真 (028) 87363803 (稿件查询)

E-mail sichuanshuili727@vip.sina.com

印 刷 四川泓泽印务有限公司

发行范围 国内公开发行

中国标准刊号 ISSN 2095-1809
CN51-1155/TV

定价全年90.00元

每期15.00元

目次 Contents

· 研究与综述 Research and Review

1 叶巴滩水电站右岸高边坡落石灾害与防治研究.....朱元桃, 丁 钊, 欧作飞
Study on rockfall disaster and prevention of high slope on the right bank of Yebatan Hydropower Station Mi Yuantao, Ding Yi, Ou Zuofei

7 深厚覆盖层高土心墙堆石坝基础防渗布置研究.....罗 巍, 张 丹
Study on anti-seepage layout of foundation of high earth core rockfill dam with deep overburden Luo Wei, Zhang Dan

11 内掺花岗岩石粉掺量对水工混凝土性能规律影响研究.....阎肖宇
Research on influence of content of internal granite powder on performance law of hydraulic concrete Yan Xiaoyu

15 水泥基渗透结晶(CCCW)材料在西部严寒地区水电工程的应用
.....李 杨, 陈 亮, 李家正, 林育强, 石 妍
Application of cement-based infiltration crystalline waterproof (CCCW) material in hydraulic project in Western cold region Li Yang, Chen Liang, Li Jiazheng, Lin Yuqiang, Shi Yan

19 不同砾石含量土石混合料的强度性质研究.....王旭光, 陈筱竹, 王 琛
Study on intensive property of earth-rock mixture with different gravel content Wang Xuguang, Chen Xiaozhu, Wang Chen

22 大石包水库工程水温预测及低温减缓措施
.....徐留兴, 余 乐, 杨秉霖, 付 杉, 周秩丞
Water temperature prediction and low temperature mitigation measures of Dashibao reservoir project Xu Liuxing, Yu Le, Yang Binglin, Fu Shan, Zhou Zhicheng

28 极端寒潮天气下胶东调水工程烟台段明渠冰期输水研究.....吕明道
Research on ice period water transfer in Yantai section of Jiaodong water transfer project under extreme cold wave weather L ü Mingdao

31 双排桩支护基坑在位移和转动方面的数值模拟研究.....周玲娜
Numerical simulation study on displacement and rotation of double-row piles supporting foundation pit Zhou Lingna

· 水资源管理 Water Resource Management

35 四川省水资源空间均衡性分析.....庄春义, 冯应和
Analysis of spatial equilibrium of water resources in Sichuan province Zhuang Chunyi, Feng Yinghe

39 引大济岷工程与都江堰灌区的关系分析.....刘长升, 刘南廷, 高连庆
Analysis on relationship between the water diversion project from the Dadu river to the Minjiang river and Dujiangyan irrigation area Liu Changsheng, Liu Nanting, Gao Lianqing

42 基于三种灰色神经网络的城市用水量预测.....陈昊天, 李 慧
Prediction of urban water consumption based on three grey neural networks Chen Haotian, Li Hui

· 工程地质 Engineering Geology

49 安宁河右岸冕宁-德昌段昔格达组地层分布、组成及工程特性研究
.....曾德志, 周道平
Study on formation distribution and composition and engineering characteristics of Xigeda strata in Mianning-Dechang section on the right bank of Anning river Zeng Dezhi, Zhou Daoping

53 四川大邑地区活动断裂构造判别及特征研究
.....白 云, 曾云峰, 钱 静, 郭蕾蕾, 闫宗平, 陈晓杰, 杜成帅
Study on structural characteristics of active faults in Dayi area of Sichuan province Bai Yun, Zeng Yunfeng, Qian Jing, Guo Leilei, Yan Zongping, Chen Xiaojie, Du Chengshuai

59 关刀桥水库软弱基座型岸坡崩塌预测分析.....张登旺
Prediction and analysis of bank slope collapse of weak foundation type in Guandaoqiao reservoir Zhang Dengwang

· 河湖管理 River and Lake Management

63 长葫灌区河湖长制探析与思考.....张智贇, 刘建林
Analysis and thinking on the system of river and lake leaders in Changhu irrigation district Zhang Zhiyun, Liu Jianlin

66 新疆玛纳斯河示范河湖建设方案探讨.....姜 莹, 张 良
Discussion on construction scheme of Manas river demonstration river and lake in Xinjiang Jiang Ying, Zhang Liang

· 水文 Hydrology

68 水文基础设施建设与财务管理模型构建.....肖 瑜, 唐 斌, 袁曾琼
Hydrological infrastructure construction and financial management model construction Xiao Yu, Tang Bin, Yuan Zengqiong

71 受水库泄洪影响的河道设计洪水计算浅析.....何 滔, 郑永佳, 王 巧
Analysis of design flood calculation of river channel affected by reservoir flood discharge He Tao, Zheng Yongjia, Wang Qiao

74 流量推求中的三点适线法选点探究.....陈 卓
Research on point selection by three-point line-fitting method in flow calculating Chen Zhuo

77 浅谈水面蒸发自动监测装置的检查与维护.....朱 朋, 石永恩
Brief talk on inspection and maintenance of automatic monitoring device for water surface evaporation Zhu Peng, Shi Yongen

· 设计与施工 Design and Construction

80 金沙江巴塘电站截流设计与施工.....陈道林
Closure design and construction of Batang hydropower station on Jinshajiang Chen Daolin

85 水利工程中高支模设计及施工技术探析.....董 俊, 施 军, 周 艺
Analysis on design and construction technology of high formwork in water conservancy project Dong Jun, Shi Jun, Zhou Yi

89 鸡公嘴渡槽槽身结构设计.....	苏利军, 刘真, 杨国浩, 熊俊源
Structure design of Jigongzui aqueduct body	Su Lijun, Liu Zhen, Yang Guohao, Xiong Junyuan
94 河床下切导致水闸下游消能不足的整治方案探讨.....	曹龙江
Discussion on regulation scheme for insufficient energy dissipation downstream of sluice caused by riverbed down-cutting	Cao Longjiang
98 龙塘水库灌区工程PCCP管阴极保护必要性探讨.....	雷明慧, 袁素勤, 廖大勇
Discussion on necessity of PCCP tube cathodic protection for Longtang reservoir irrigation area project	Lei Minghui, Yuan Suqin, Liao Dayong
100 浅谈倒虹吸管线中球墨铸铁管的应用.....	刘延学, 赵健, 史亚波, 陈海瑞
Brief talk on application of ductile iron pipe in inverted siphon line	
104 泵站进水流道混凝土温控技术措施.....	张志华, 夏天, 郭志杰
Technical measures for temperature control of concrete channel of pump station inlet	Zhang Zhihua, Xia Tian, Guo Zhijie

· 水环境与水生态 Water Environment and Water Ecological

108 三岔水库水质现状及富营养化状况分析.....	吴柯岑
Analysis on water quality and eutrophication of Sancha reservoir	Wu Kecen
112 黑龙滩水库泄放生态流量的困难与思考.....	任彬斌
Difficulties and considerations of releasing ecological flow in Heilongtan reservoir	Ren Binbin
115 九龙河生态流量评估及保障措施探讨.....	吴传漫, 张孟康, 操丕军
Discussion on ecological flow assessment and guarantee measures of Jiulong river	
119 水生植物对校园人工湖水水质改善应用浅析.....	刘彦汐, 王怡, 曾鹏
Analysis on application of aquatic plants in improving the water quality of campus artificial lakes	Liu Yanxi, Wang Yi, Zan Peng

· 水土保持 Soil and Water Conservation

123 遥感技术在四川省水土保持监测监管中的应用.....	唐云逸, 游翔, 杨雅松, 姚洋, 廖睿智, 杨玉婷
Application of remote sensing technology in monitoring and supervision of soil and water conservation in Sichuan province	
128 沱江流域水土流失动态变化及原因分析.....	阳帆, 慕凯, 赵芹, 文海东, 唐云逸, 杨雅松
Dynamic change and reason analysis of soil and water loss in Tuojiang river basin	Yang Fan, Mu Kai, Zhao Qin, Wen Haidong, Tang Yunyi, Yang Yasong

· 水利信息化与自动控制 Water Conservancy Informatization and Automatic Control

132 北斗高精度定位系统在水库坝体变形监测中的应用.....	葛海亮, 陈顺平, 陈雨晴, 陈宜彩
Application of Beidou high-precision positioning system in deformation monitoring of reservoir dam	Ge Hailiang, Chen Shunping, Chen Yuqing, Chen Yicai
135 数字集成电路技术在水文水下信号发生器中的应用.....	王挺
Application of digital integrated circuit technology in hydrological underwater signal generator	Wang Ting
139 多源数据水利工程三维模型的构建.....	张瑞军, 张继宇, 王占龙, 田珊
Construction of three-dimensional model of hydraulic engineering with multi-source data	Zhang Ruijun, Zhang Jiyu, Wang Zhanlong, Tian Shan

· 建设管理 Construction and Management

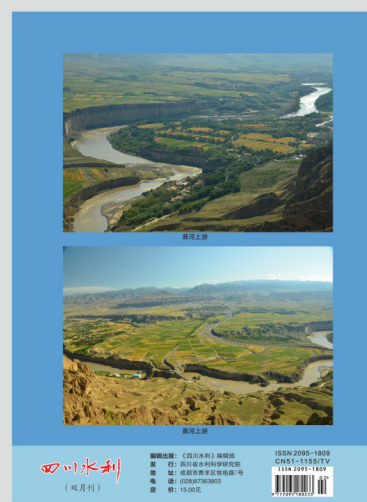
142 基于工程量清单计价的多因素评标机制研究.....	何欢, 程辉
Study on multi-factor bid evaluation mechanism based on bill of quantities	He Huan, Cheng Hui
146 基于改进的LEC对水利工程安全风险评价研究.....	杨凯, 吕凤
Study on safety risk assessment of hydraulic engineering based on improved LEC	
149 石棉县小水电分类整改中存在的问题及对策建议.....	李涛, 吴国银, 张艺耀, 耿琳
Problems existing in classified rectification of small hydropower in Shimian County and countermeasures and suggestions	Li Tao, Wu Guoyin, Zhang Yiyao, Geng Lin
153 若碧沟水电站压力钢管安全检测与评估分析.....	张玉宁, 彭章雅, 赵川, 王筱红, 曹杨, 郭俊利
Safety inspection and evaluation analysis of penstock for Ruibigou hydropower station	Zhang Yuning, Peng Zhangya, Zhao Chuan, Wang Xiaohong, Cao Yang, Guo Junli

· 水文化与水生态文明 Water Culture & Water Ecological Civilization

156 成都市水文化遗产特点及保护利用研究.....	高竹军, 彭相荣, 李双江, 刘晓蓉
Study on the characteristics and protection-utilization of water cultural heritage in Chengdu	Gao Zhujun, Peng Xiangrong, Li Shuangjiang, Liu Xiaorong
161 乡村振兴视角下“水美经济”的实践探究——基于桫欈河水系连通及农村水系综合整治项目经验启示.....	吴雨昕, 李增永, 刘艺平, 袁素勤, 吴帆
Practical exploration of "Water Beauty Economy" from the perspective of rural revitalization——Based on the experience and enlightenment of the Qimu river water system connection and rural water system comprehensive regulation project	Wu Yuxin, Li Zengyong, Liu Yiping, Yuan Suqin, Wu Fan

· 水利职业教育 Water Conservancy Vocational Education

165 公园城市背景下水利院校大学生水生态文明意识培育的意义及路径探究.....	王雪燕, 高键, 王进
Research on the significance and path of cultivating water ecological civilization awareness of water conservancy college students under the background of park city	Wang Xueyan, Gao Jian, Wang Jin



彩页目录

封二:《四川水利》专家委员会、理事会

封三:四川新宏图书有限公司

前插一~二:2023年水利10项重点工作

前插三~四:中共四川省委四川省人民政府

关于进一步加强水利工程建设
保障经济社会高质量发展的意见

前插五~六:2023四川水利“上台阶”这么干

封面:绵阳湍江云栖逸境水利风景区 张子刚 摄

封底:黄河上游 卢鑫 摄