

# 山西水利科技

SHANXI HYDROTECHNICS

SHANXI SHUILIKEJI

## 季刊

1971 年创刊

2010 年

第 3 期

(总第 177 期)

主管:山西省水利厅

主办:山西省水利学会

出版:山西省水利水电科学研究院

编辑:《山西水利科技》编辑部

地址:太原市桃园 4 巷 26 号

邮编:030002

印刷:太原市华葆彩印厂

发行范围:公开自办发行

主编:荣丰涛

本期责任编辑:荣丰涛 李培远

闫夏娇

英文编辑:荣 榕

电话:(0351)4044303

电子信箱:sxslkj@163.com

ISSN 1006 - 8139

CN14 - 1184/TV

年定价:24.00 元

期定价:6.00 元

## 目 次

### · 试验研究 ·

1. 基于多元线性回归分析的蝶阀关闭规律函数关系研究 ..... 程洪霞 吴建华(1)
2. 迷宫流道断面形状对灌水器水力性能的影响 ..... 李琳 李治勤(4)
3. 活性污泥法中的生物作用 ..... 陈燕飞(8)
4. 消力池水跃消能试验分析 ..... 邱国平 李治勤(11)
5. 隧道爆破对山顶危石振动影响的监测与分析 ..... 魏建华 李亚利(13)

### · 水文水资源水环境 ·

6. 山西农村饮水高氟水问题及处理措施分析 ..... 赵印英 孟国霞 杨丽霞(16)
7. 永庆水文站 0.2 相对水深流速系数分析 ..... 何永健 张斌(18)
8. 圣天湖渔业环境现状及对策 ..... 武栋 王亚妮 王琦 胡长静(20)
9. 吕梁市水资源实时监控管理系统的应用分析 ..... 常芳(23)

### · 设计与施工 ·

10. 桂林市春天湖船闸设计特点 ..... 李建波(25)
11. 万家寨引黄北干线 1 号隧洞模拟接缝的衬砌计算法 ..... 郑如义(27)
12. 自动抓梁设计的探讨 ..... 赵瑞花(29)
13. 旋挖钻机施工桩基础施工质量控制 ..... 薛桦(32)
14. 控制爆破技术在坪上集水廊道工程开挖中的应用 ..... 黄青平(35)
15. 软岩隧洞施工技术方法 ..... 温定煜(37)
16. 液压抓斗造混凝土防渗墙在土坝加固工程中的应用 ..... 饶敏慧 孙小荣(40)
17. 山西省夹马口一级干渠设计方案选择 ..... 郭红争(43)
18. TBM 施工隧洞衬砌管片生产质量控制 ..... 耿邱峰(45)
19. 固结灌浆在万家寨引黄工程南干线 7 号洞的两个支洞渗水处理工程中的应用 ..... 许建业(49)

20. 自密实堆石混凝土在围滩水电站中的应用 ..... 王冰(52)
21. 自密实堆石混凝土在恒山水库除险加固工程中的应用 ..... 杨会峰(54)
22. 商品混凝土在北赵引黄工程中的应用 ..... 关志刚 郭鹏(56)
23. 顶管技术在输水管道穿越铁路中的应用 ..... 王波(59)
24. 保护层一次开挖爆破技术在龙华口枢纽工程的应用 ..... 张俊峰(61)
25. 漾沱河灌区二坝堤防加固工程的设计与施工 ..... 于瑤(64)
26. 河津小石咀护岸工程结构断面存在的问题及改进建议 ..... 王海峰 柴俊芳(66)
27. 预应力钢筒混凝土管(PCCP)保护层设计探讨 ..... 李向东(68)
28. 五曲湾水库除险加固工程防洪设施改造的分析和计算 ..... 樊灏(71)
29. 渠道混凝土衬砌机在施工中的应用 ..... 郭永刚(74)
30. 册田水库工程金属结构更新改造设计 ..... 马银珍(76)

### · 管理及其他 ·

31. 激光定位技术在水利工程规划沙盘展示系统中的应用研究 ..... 王军(79)
32. 山西省水利电子沙盘系统栅格影像处理机制的扩展与完善 ..... 李毅(83)
33. 关于规范山西河道采砂的思考 ..... 李国栋(86)
34. 山西省岢岚县地质灾害形成的致灾因素与防治 ..... 孙占法(88)
35. 黄颡鱼成鱼池塘养殖试验 ..... 张海红(91)
36. 罗非鱼的工厂化育苗与越冬技术实验 ..... 王亚宏 侯秉云(93)
37. 夹马口灌区年度灌溉引水计划的制定与执行 ..... 王中新(95)

# SHANXI HYDROTECHNICS

2010 NO. 3(Total No. 177)

## Content

The Study of the Function Relationship among the Butterfly Valve Closure Rule with Multiple Linear Regression Analysis	CHENG Hong-xia WU Jian-hua(1)
Influence of Section Shapes of Labyrinth Channels on the Hydraulic Performance of Emitters	LI Lin LI Zhi-qin(4)
The Biological Function of Activated Sludge Floc	CHEN Yan-fei(8)
The Experimental Analysis of Hydraulic Jump Energy Dissipation of Stilling Pool	DI Guo-ping LI Zhi-qin(11)
Monitoring and Analyzing the Influence of Tunnel Blasting on Vibrating Dangerous Rock Located at the Top of Mountain	WEI Jian-hua LI Ya-li(13)
On the Problems of Heavy Fluorine Compound in Shanxi's Rural Water-drinking and Analyzing the Treatment Measures	ZHAO Yin-ying MENG Guo-xia YANG Li-xia(16)
Analysis on Velocity Coefficient of 0.2 the Measurement water Depth of Yongqing Hydrology Station	HE Yong-jian ZHANG Bin(18)
The Current Situation and Countermeasure of Fishery Environment in Shengtian Lake	WU Dong WANG Ya-ni WANG Qi HU Chang-jing(20)
Application Analysis on Liliang City's Water Resources Real-time Monitoring Management System	CHANG Fang(23)
The Design Features of the Spring Lake Ship Lock of Guilin City	Li Jian-bo(25)
Tunnel Lining Computation by Joint-Simulating Method in No.1 Tunnel of North Main Line of Wanjiashizi Yellow River Diversion Project	ZHENG Ru-yi(27)
Discussion on Design of Automatic Grab Beam	ZHAO Rui-hua(29)
Controlling Construction Quality of Pile Foundation Constructed by Rotary Drilling Machine	XUE Hua(32)
Application of Presplit Blasting Technique to Excavate Pingshang Project's Collecting Gallery	HUANG Qing-ping(35)
On Construction Technology And Methods About The Soft Rock Tunnel	WEN Ding-yu(37)
Using Hydraulic pressure Clamshell to Build Anti-seepage Concrete Wall in Consolidation Project of Earth Dam	RAO Min-hui SUN Xiao-rong(40)
Selecting Design Plan for First Stage Main Canal of Jiamakou Pumping Station	GUO Hong-zheng(43)
Quality Control of Manufacturing Lining Segment of Tunnel Constructed by TBM	GENG Qiu-feng(45)
Applying the consolidation Grouting Technique to Treat seepage of Two Drifts that Belong to No.7 Tunnel in South Main Line of Wanjiashizi Yellow River Diversion Project	XU Jian-ye(49)
Application of Self-compacting Concrete to Fill Rock-fill Dam in Weitan Hydropower Station	WANG Bing(52)
Application of Self-compacting Concrete to Fill Rock-fill Dam in Hengshan Reservoir's Danger-removing and Consolidating Project	YANG Hui-feng(54)
Application of Ready-mixed Concrete in Yellow River Diversion Project of Beizhao	GUAN Zhi-gang GUO peng(56)
Application of Pipe-pushing Technique to Make the Water Delivery Pipe underneath Pass the Railway	WANG Bo(59)
Applying the Technique of Blasting the Whole Rock Protection Layer at Once in Longhuakou Reservoir Project	ZHANG Jun-feng(61)
On Design and Construction of No.2 Rubber Dam's Levee-consolidating Works in Hutuohe Irrigation District	YU Yao(64)
On Existing Problems of Cross Section Structure of Hejing Xaoshezui Bank Revetment Works and Improvement Suggestions	WANG Hai-feng CHAI Jun-fang(66)
The Discussion of the Design Method for the Coating of the PCCP	LI Xiang-dong(68)
The Analysis and Calculation of the Flood Prevention Measure in the Danger-eliminating and Reinforcing Project of the Wuquwan Reservoir	FAN Hao(71)
Application of Lining Machine to Construct Concrete Lining of Canal	GUO Yong-gang(74)
Rebuilding Design of Cetian Reservoir's Metal Structure	MA Yin-zhen(76)
Research on Utilization of Laser Positioning Technique in Demonstration System of Hydro-project Regulation Sand Table	WANG Jun(79)
Perfecting and Expanding the Mechanism of Raster Image Solution of Shanxi Water Conservancy Electronic Sand Table	LI Yi(83)
Thinking on Normalizing Sand-extracting in Shanxi Province's River Channels	LI Guo-dong(86)
Geological Hazard and Countermeasures in Kelan County, Shanxi Province	SUN Zhan-fa(88)
Experiment on Pond Culture of Pelteobagrus Fulvidraco	ZHANG Hai-hong(91)
Technical Test of Tilapia's Factory Breeding and Overwintering	WANG Ya-hong HOU Bing-yun(93)
Drawing up and Carrying out the Annual Water Diversion Plan for Irrigation in Jiamakou Irrigation District	WANG Zhong-xin(95)