



ISSN 1674-8530
CN 32-1814/TH
CODEN PAJIE2

排灌机械工程学报

Journal of Drainage and Irrigation Machinery Engineering

江苏省教育厅 主管

江苏大学 主办



卷盘式喷灌机电驱动单元

卷盘式喷灌机水涡轮驱动单元

卷盘式喷灌机液压驱动单元

喷滴灌两用机组

汤玲迪, 袁寿其, 刘俊萍, 等. 中国喷灌机现状与发展思考, 2022, 40(10): 1072-1080.



CSCD核心库来源期刊
全国中文核心期刊
中国科技核心期刊
中国农林核心期刊

中国·镇江
Zhenjiang, China

2022年10月

第40卷 第10期
Vol.40 No.10

目次

● 泵理论与技术

栏目主编：王福军 袁建平

叶片包角对离心泵水力性能及磨损特性的影响

刘栋,黄凯,倪子建,杨嵩,尤保健(973)

导叶开度对水泵水轮机调相运行水环流动的影响

刘殿海,祝宝山,陈帅,陈振木,张飞(981)

螺旋角对单螺杆泵泄漏影响的数值计算

汪怡然,陈楠,秦杭晓,俞晓东(987)

基于RBF神经网络的离心泵地脚螺栓松动故障诊断

宋礼威,张翊勋,陈泽宇,张宇航,范传翰,肖幸鑫,董亮(993)

● 水利水电工程

栏目主编：戴会超 仇宝云

河套灌区渠系优化配水模型应用研究

韩宇,邵梦璇,李彤姝,郭珊珊,孙志鹏,张明武(999)

基于优化VMD组合降噪和LMD的水轮机空化声发射信号特征提取

刘忠,潘宜桦,邹淑云,陈星宇,李志鹏(1007)

预测水泥砒砂岩强度的Markov灰色残差模型

刘鑫,申向东,景宇,任杰,吕昕,耿凯强,董国际,郝政凯(1014)

● 流体工程

栏目主编：王正伟 林建忠

泵站双节式拍门合理开启角度分析

陆伟刚,周秉南,陈华,夏辉,徐波(1020)

人字形光伏阵列防风效果的数值模拟

赵文举,刘贵元,虎军宏,胡家珍(1027)

连栋温室内湿帘-风机流场特性

高振军,李文杨,丁小明,李苇,NYAMOSOR Batkhoo(1033)

● 农业水土工程

栏目主编：康绍忠 许迪

灌溉时段及水温对膜下滴灌棉花生长及产量的影响

王振华,武小荻,王天宇,宗睿,王东旺,陈睿(1040)

不同种植年限压砂地土壤水分入渗过程及模型分析

王幼奇,阮晓晗,白一茹,高小龙(1048)

● 农业现代化理论与装备制造

栏目主编：施卫东 黄修桥

以农业科技现代化促进农业现代化的实践路径

金丽馥,吴震东(1056)

喷射参数对扇形喷嘴雾化特性的影响

蒋小平,王帅,陈建华,季静,朱朝佳,朱兴业(1065)

中国喷灌机现状与发展思考

汤玲迪,袁寿其,刘俊萍,邱志鹏,马骏,孙向阳,周传国,高志俊(1072)

CONTENTS

- Effects of blade wrap angle on hydraulic performance and erosion characteristics of centrifugal pump
..... *LIU Dong, HUANG Kai, NI Zijian, YANG Song, YOU Baojian*(973)
- Influence of guide vane opening on water-ring flow characteristics of pump-turbine in synchronous condenser mode
..... *LIU Dianhai, ZHU Baoshan, CHEN Shuai, CHEN Zhenmu, ZHANG Fei*(981)
- Numerical simulation on influence of helix angle on single screw pump leakage
..... *WANG Yiran, CHEN Nan, QIN Hangxiao, YU Xiaodong*(987)
- Fault diagnosis of centrifugal pump anchor bolt loosening based on RBF neural network
..... *SONG Liwei, ZHANG Yixun, CHEN Zeyu, ZHANG Yuhang, FAN Chuanhan, XIAO Xingxin, DONG Liang*(993)
- Study on optimal water distribution model of canal system in Hetao irrigation district
..... *HAN Yu, SHAO Mengxuan, LI Tongshu, GUO Shanshan, SUN Zhipeng, ZHANG Mingwu*(999)
- Feature extraction of cavitation acoustic emission signal of hydraulic turbine based on optimized VMD combined noise reduction and LMD
..... *LIU Zhong, PAN Yihua, ZOU Shuyun, CHEN Xingyu, LI Zhipeng*(1007)
- Markov grey residual model for predicting strength of cement Pisha sandstone
..... *LIU Xin, SHEN Xiangdong, JING Yu, REN Jie, LYU Xin, GENG Kaiqiang, DONG Guoji, HAO Zhengkai*(1014)
- Analysis on reasonable opening angle of double-stage flap valve in pumping station
..... *LU Weigang, ZHOU Bingnan, CHEN Hua, XIA Hui, XU Bo*(1020)
- Numerical simulation for windproof effect of herringbone photovoltaic array
..... *ZHAO Wenju, LIU Guiyuan, HU Junhong, HU Jiazhen*(1027)
- Flow field characteristics of wet curtain and fan in multi-span greenhouse
..... *GAO Zhenjun, LI Wenyang, DING Xiaoming, LI Wei, NYAMOSOR Bathkuu*(1033)
- Effects of irrigation timing and water temperature on cotton growth and yield under mulched drip irrigation
..... *WANG Zhenhua, WU Xiaodi, WANG Tianyu, ZONG Rui, WANG Dongwang, CHEN Rui*(1040)
- Process of soil moisture infiltration and model analysis of gravel-mulched land with different planting years
..... *WANG Youqi, RUAN Xiaohan, BAI Yiru, GAO Xiaolong*(1048)
- Practical path of promoting agricultural modernization by agricultural science and technology modernization
..... *JIN Lifu, WU Zhendong*(1056)
- Analysis of influencing factors on atomization characteristics of fan-shaped nozzle
..... *JIANG Xiaoping, WANG Shuai, CHEN Jianhua, JI Jing, ZHU Chaojia, ZHU Xingye*(1065)
- Challenges and opportunities for development of sprinkler irrigation machine in China
..... *TANG Lingdi, YUAN Shouqi, LIU Junping, QIU Zhipeng, MA Jun, SUN Xiangyang, ZHOU Chuanguo, GAO Zhijun*(1072)