

目次

● 泵理论与技术

栏目主编: 王福军 袁建平

深海扬矿泵磨损特性的两相流数值模拟预测

刘少军, 文豪, 邹伟生, 胡小舟, 董喆 (541)

缩放型喷嘴空化射流空泡云演化规律的试验研究

李伟, 张文全, 施卫东, 杨勇飞, 曹卫东 (547)

热力学效应对水翼云空化非定常特性的影响

唐庆宏, 于安, 郑源, 赵梦昀, 许哲, 唐魏 (553)

推力瓦几何参数对核主泵推力轴承油系统特性的影响

唐乾皓, 赖喜德, 陈小明, 李萍, 杜江, 程海 (560)

基于改进粒子群算法的喷水推进泵叶片优化设计

郝宗睿, 李超, 任万龙, 王越, 华志励, 刘刚 (566)

柱形轮毂型式循环水泵的水力及结构特性

焦海峰, 汤方平, 施伟, 石丽建, 张允敬 (571)

● 水利水电工程

栏目主编: 戴会超 仇宝云

基于云模型的梯级泵站系统服役状态综合评估

徐存东, 朱兴林, 张锐, 田俊娇, 王燕, 王荣荣 (577)

基于 BIM 技术与 B/S 架构的大坝安全可视化监测系统

杰德尔别克·马迪尼叶提, 牛志伟, 李培聪, 张宇, 蒯鹏程, 李家田 (583)

● 流体工程

栏目主编：王正伟 林建忠

不同参数对双浮体波能装置水动力特性的影响

纪仁玮, 盛其虎, 王树齐, 张玉全, 张亮(589)

液液系统中荷电射流不稳定性

王晓英, 武识博, 王贞涛, 王军锋, 王东保(596)

油气田套管用钢两相流流动腐蚀

周昊, 吉庆丰, 刘雯, 马鸿雁, 王磊(602)

升主动脉内球囊反搏术仿真

刘洪艳, 王颢, 荆腾, 陈思, 王昆, 贺照明(607)

● 农业水土工程

栏目主编：康绍忠 许迪

渗灌管首末端压力与茶树根区土壤水分运移关系

张亨年, 张川, 闫浩芳, 胡永光, 赵宝山, 李欣雨, 邢德科(613)

基于 CFD 的挡风墙防风效果仿真

李家乐, 赵文举, 严正(620)

改进直线型沉沙池在农业微灌中的运行效果

胡松可, 李文昊, 杨广, 刘宁宁(626)

喷灌水肥与种植密度互作对水氮利用效率和冬小麦产量的影响

邹露阳, 陈震, 段福义, 马春芽, 范永申(632)

粒子群算法的改进及在农业水资源配置的应用

张倩, 张建丰, 李涛, 辛彦林, 史娟(637)

● 排灌装备制造技术

栏目主编：施卫东 黄修桥

肥液 pH 值和电导率测量仪的设计与试验

冯瑞珏, 王智东, 李志锋(643)

CONTENTS

Deep-sea mining pump wear prediction using two-phase flow numerical simulation	LIU Shaojun, WEN Hao, ZOU Weisheng, HU Xiaozhou, DONG Zhe(541)
Experimental study on cavitation cloud evolution law of cavitation jet of convergent-divergent nozzle	LI Wei, ZHANG Wenquan, SHI Weidong, YANG Yongfei, CAO Weidong(547)
Influence of thermodynamic effects on cloud cavitation dynamics characteristics around 3D hydrofoil	TANG Qinghong, YU An, ZHENG Yuan, ZHAO Mengshang, XU Zhe, TANG Wei(553)
Effect of thrust pad geometric parameters on characteristics of thrust bearing oil system for nuclear coolant pump	TANG Qianhao, LAI Xide, CHEN Xiaoming, LI Ping, DU Jiang, CHENG Hai(560)
Optimization design of water jet propulsion pump blade based on improved PSO algorithm	HAO Zongrui, LI Chao, REN Wanlong, WANG Yue, HUA Zhili, LIU Gang(566)
Hydraulic and structural characteristics of cylindrical hub type circulating water pump	JIAO Haifeng, TANG Fangping, SHI Wei, SHI Lijian, ZHANG Yunjing(571)
Comprehensive evaluation of service status of cascade pumping station based on cloud model	XU Cundong, ZHU Xinglin, ZHANG Rui, TIAN Junjiao, WANG Yan, WANG Rongrong(577)
Dam safety visual monitoring system based on BIM technology and B/S architecture	JIEDEERBIEKE · Madiniyeti, NIU Zhiwei, LI Peicong, ZHANG Yu, KUAI Pengcheng, LI Jiatian(583)
Effect of different parameters on hydrodynamic characteristics of double-floating-body wave energy converter	JI Renwei, SHENG Qihu, WANG Shuqi, ZHANG Yuquan, ZHANG Liang(589)
Instability of charged jet in liquid-liquid system	WANG Xiaoying, WU Shibo, WANG Zhentao, WANG Junfeng, WANG Dongbao(596)
Flow corrosion of casing steel for oil and gas field in two-phase flow	ZHOU Hao, JI Qingfeng, LIU Wen, MA Hongyan, WANG Lei(602)
Simulation of ascending aorta balloon counter pulsation	LIU Hongyan, WANG Hao, JING Teng, CHEN Si, WANG Kun, HE Zhaoming(607)
Relationship between subsurface seepage pipe pressure and soil water movement at tea root zone	ZHANG Hengnian, ZHANG Chuan, YAN Haofang, HU Yongguang, ZHAO Baoshan, LI Xinyu, XING Deke(613)
Simulation on wind-proof effect of wind wall based on CFD	LI Jiale, ZHAO Wenju, YAN Zheng(620)
Operation effect of improved straight-line desilting basin in agricultural micro-irrigation	HU Songke, LI Wenhao, YANG Guang, LIU Ningning(626)
Effects of water-fertilizer interaltion with planting density on water and nitrogen use efficiency and yield of winter wheat under sprinkler irrigation system	ZOU Luyang, CHEN Zhen, DUAN Fuyi, MA Chunya, FAN Yongshen(632)
Improvement of particle swarm optimization and its application in agricultural water resources allocation	ZHANG Qian, ZHANG Jianfeng, LI Tao, XIN Yanlin, SHI Juan(637)
Design and experiment on fertile solution pH value and electrical conductivity measuring instrument	FENG Ruijue, WANG Zhidong, LI Zhifeng(643)