

全 国 中 文 核 心 期 刊
中 国 科 技 核 心 期 刊
RCCSE 中 国 核 心 学 术 期 刊

ISSN 1009 - 640X
CODEN SSGXAH

水利水运工程学报

HYDRO-SCIENCE AND ENGINEERING

1

2020



NHRI
Since 1935

水 利 部
交通 运输 部
国家 能源 局

南 京 水 利 科 学 研 究 院

NANJING HYDRAULIC RESEARCH INSTITUTE

水 利 水 运 工 程 学 报

(双月刊)

2020 年 2 月

第 1 期(总第 179 期)

目 次

长三角地区水安全保障技术集成与应用专题

平原河网区河道交汇口分流特性模型试验研究

..... 刘国庆,王 蔚,范子武,穆守胜,贾本有,乌景秀,邓 翌(1)

森林覆盖率变化对流域洪水特性影响的数值模拟..... 姚 原,顾正华,李 云,辜樵亚,范子武(9)

苏南运河沿线精细化水文-水动力模型构建及验证

..... 杨 帆,周钰林,范子武,乌景秀,贾本有,刘国庆,谢 忱,王朝勇(16)

污泥厌氧消化液中磷的去除效果与机制研究——基于离子交换与改性水滑石吸附法

..... 付瑜玲,严晗璐,王 丽,陈 诚,陈求稳(25)

等宽明渠交汇口流速分布特性数值模拟..... 周 舟,曾 诚,周 婕,王玲玲,丁少伟(32)

竖缝式鱼道休息池水动力特性研究..... 王晓刚,李 云,何飞飞,宣国祥,王 彪(40)

地形变异条件下长江口南港河段水动力变化..... 钱明霞,路川藤,孙高霞,丁 伟,朱方剑(51)

天然河道丁坝群局部冲刷三维数值模拟..... 戚 蓝,曾庆达,吉顺文(59)

基于浸没边界法的水库变动水面模拟及验证..... 周 睿,程永光,吴家阳(66)

内河框架码头桩柱绕流水动力特性的二维数值模拟

..... 刘明维,曾丽琴,陈 刚,沈立龙,牟治忠,王明镜(74)

桩承式加筋路堤有限元几何建模方法及边坡效应研究

..... 姜彦彬,何 宁,许滨华,张中流,耿之周,石北啸(84)

密度及应力水平对珊瑚砂强度变形特性影响..... 侯贺营,曹永勇,张绍栋,关云飞(92)

基于 3DEXPERIENCE 平台的 CATIA 二次开发下的拱坝结构快速建模 楼 涛,包腾飞(98)

基于模糊神经网络的水电施工安全隐患评价..... 刘 帅,盛金保,王昭升,杨德玮(105)

特高拱坝动态安全风险系统研发及应用

..... 王子成,许后磊,赵志勇,张礼兵,陈 豪,陈亚军,徐智勇(112)

南京水利科学研究院获奖成果介绍

南科院主要参加完成的“长江三峡枢纽工程”成果喜获国家科技进步特等奖 (119)

期刊基本参数:CN32-1613/TV * 1979 * b * A4 * 119 * zh * P * ¥ 12.00 * 900 * 15 * 2020-02

HYDRO-SCIENCE AND ENGINEERING

(Bimonthly)

Feb. 2020

No. 1 (Total No. 179)

CONTENTS

Monographic Studies of Water Safety Technology Integration and Application in the Yangtze River Delta Region

Model test study on diversion characteristics of river junction in plain river network area

..... LIU Guoqing, WANG Wei, FAN Ziwu, MU Shousheng, JIA Benyou, WU Jingxiu, DENG Zhao (1)

Numerical simulation on the flood characteristics under different forest coverage rates of watershed

..... YAO Yuan, GU Zhenghua, LI Yun, GU Qiaoya, FAN Ziwu (9)

Building and verification of refined hydrology-hydrodynamic model for South Jiangsu Canal and its river networks

..... YANG Fan, ZHOU Yulin, FAN Ziwu, WU Jingxiu, JIA Benyou, LIU Guoqing, XIE Chen, WANG Chaoyong (16)

Study on efficiency and mechanism of phosphorus removal from supernatant of anaerobically digested sludge
—based on anion exchange and modified hydrotalcite adsorption methods

..... FU Yuling, YAN Hanlu, WANG Li, CHEN Cheng, CHEN Qiuwen (25)

Numerical investigation on distribution characteristics of velocities at equal-width open-channel confluences

..... ZHOU Zhou, ZENG Cheng, ZHOU Jie, WANG Lingling, DING Shaowei (32)

A study of hydrodynamic characteristics of resting pools of vertical slot fishway

..... WANG Xiaogang, LI Yun, HE Feifei, XUAN Guoxiang, WANG Biao (40)

Hydrodynamic changes in south channel of Yangtze River estuary under topographic variation conditions

..... QIAN Mingxia, LU Chuanteng, SUN Gaoxia, DING Wei, ZHU Fangjian (51)

Three-dimensional numerical simulation of local scour based on spur dikes at natural river

..... QI Lan, ZENG Qingda, JI Shunwen (59)

Simulation and verification of reservoir fluctuating water level based on immersed boundary method

..... ZHOU Rui, CHENG Yongguang, WU Jiayang (66)

2D numerical simulation of hydrodynamic characteristics of water flowing around inland river frame wharf in tandem and parallel arrangement

..... LIU Mingwei, ZENG Liqin, CHEN Gang, SHEN Lilong, MOU Zhizhong, WANG Mingjing (74)

Geometrical modelling with finite element method and slope effect of geosynthetic reinforced and pile-supported embankments

..... JIANG Yanbin, HE Ning, XU Binhua, ZHANG Zhongliu, GENG Zhizhou, SHI Beixiao (84)

Analysis of strength-deformation behavior of coral sand with different densities and stress levels

..... HOU Heying, CAO Yongyong, ZHANG Shaodong, GUAN Yunfei (92)

Rapid modeling of arch dam structure under CATIA secondary development based on 3DEXPERIENCE platform

..... LOU Tao, BAO Tengfei (98)

Evaluation method for safety hidden danger of hydropower construction based on fuzzy neural network

..... LIU Shuai, SHENG Jinbao, WANG Zhaosheng, YANG Dewei (105)

Development and application of dynamic safety risk analysis system for super-high concrete arch dam

..... WANG Zicheng, XU Houlei, ZHAO Zhiyong, ZHANG Libing, CHEN Hao, CHEN Yajun, XU Zhiyong (112)

NEWS (119)