

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

世界期刊影响力指数 (WJCI) Q2 期刊

楚天卓越行动计划楚天重点期刊

ISSN 1001-4179

CN 42-1202/TV

CODEN RECHFF

人民长江

YANGTZE RIVER

第 **I** 期

2024年1月 第55卷 总第710期



水利部长江水利委员会 主办



ISSN 1001-4179



9 771001 417241



卷首语 刘冬顺

流域规划与江湖治理

长江-鄱阳湖顶托作用评价指标研究..... 陈 璐,邓金运(1)
长江感潮河段径流对潮波变形和传播的影响研究..... 罗 亮,解 超,蒋陈娟,严叔春(6)
水沙变化条件下不同边界弯曲河道演变特征研究 陈羿名,渠 庚,郑承太,胡呈维,栾华龙(14)

防洪减灾

三峡水库对城陵矶防洪补偿控制水位研究 I ——需求分析与优化条件
..... 邹 强,胡 挺,肖扬帆,饶光辉,何小聪(21)
基于 CiteSpace 的洪涝灾害遥感监测评估研究进展 石 倩,彭焕华,夏浩南,唐梓涵,陈 浩(28)

水环境与水生态

量子点光谱监测在长江流域排水系统中的应用..... 王嘉薇,周田硕,霍旭佳,曹启明(37)
典型河湖治理经验及对长江流域生态保护的启示 周 雨,王殿常,余甜雪,叶 盛,冉启华(45)
湖泊淤泥脱水固化复合调理剂优化及其作用机制..... 王龙涛,夏新星(51)
长三角一体化示范区生态产品价值转化模式研究 李小婷,朱红伟,王 哲(60)
长江安徽段江湖连通性及生物通道恢复研究..... 刘宏高,熊 昱,李德旺,包琦琳,林国义,储 涛(69)
阿尔泰山河谷林径向生长对气候的响应..... 曹攀琦,叶 茂,赵凡凡,张凯丽(75)
应用机器学习研究土壤侵蚀的文献计量分析..... 李潼亮,李斌斌,张凤宝,史方颖,杨明义,何 庆(82)

水文水资源

长江上游关键区主汛期典型涝年气候成因辨析..... 邢雯慧,王飞龙,邱 辉,时玉龙(91)
光流法雷达外推产品在突发强降水预报中的应用..... 魏 凡,田 刚,徐卫立,李春龙(97)
汶川县降雨时空分布特征及设计暴雨频率分析..... 谢雅洁,刘曙光,周正正(105)
基于地区线性矩法的四川省 24 h 极值降雨频率分析 胡 静,王帅人,覃光华,黎小东,兰 平(113)
基于多源卫星数据的高邮湖长时序水位变化监测..... 陈健茹,徐 佳,王冬梅(120)

地质与勘测

三峡库区滑坡工程加固和生态护坡措施研究进展 李欣然,张桂荣,林 程,谭瑞琪(127)
地层倾角及侧向摩擦对滑坡影响的物理模拟研究 何文刚,赵远雯,何 鸣,袁达雄(135)
基于 InSAR 的乌东德水电站库区边坡形变监测及分析 毕自航,李素敏,袁利伟,蔺 瑜(143)

工程建设

汉江新集水电站土石坝水下抛填离心模型试验研究 李 锐,张方涛,李 波,张著彬,余 伟,黄继平(151)

变速恒频水轮机变流量工况下不稳定流动数值模拟 毛 成, 苏 立, 沈春和, 文贤馗(157)

U 型渠道中直角三角形量水槽体型设计 戚玉彬(162)

科学试验研究

岩溶洼地建库背景下水 - 气耦合试验相似材料研制 邵胜平, 陈世万, 郑克勋, 沈春勇(168)

超高延性水泥基复合材料耐久性研究进展 王玉璞, 李家正, 石 妍(175)

铁离子作用下膨胀土干湿循环裂隙演化机制 肖桂元, 朱耀琪, 王延伟, 徐光黎, 张达锦(184)

干旱和局部渗水对膨胀土渠堤稳定性影响研究 解 林, 张中印, 艾 东, 吕士展(192)

跨活断层隧洞抗错断技术模型试验研究 曹 俊, 崔 臻, 颜天佑, 李建贺(200)

地震荷载下预应力锚固边坡离心振动模型试验研究 尚佳艺, 赵宇飞, 汪小刚, 李林昊(208)

根系影响下粗糙土 - 岩接触面剪切损伤模型研究 刘振贤, 丁 瑜, 夏振尧, 彭博识(216)

砂柱法制样及剪切速率对黏性粗料三轴试验的影响 张富臣, 王鹏程, 张庆建, 李玉贵, 于 磊(223)

重塑条件对红黏土力学特性影响试验研究 冉宇玲, 杨秀娟, 柏 巍, 樊恒辉, 李 科(229)

工程运行管理

基于 LV - DBSCAN 算法的大坝安全监测数据异常检测 戴 领, 李少林, 刘光彪, 纪传波, 段国学(236)

水头衔接的梯级电站水头分配问题研究 张子平, 许江松, 黄 迪(242)

广告 · 书评

人才建设背景下的技术转移——评《国家技术转移体系建设方案》 林 琳, 赵 静

当代翻译技术作用下翻译模式的新发展探究——评《翻译技术研究》 于 莉

大学生信息素养教育创新研究——评《大学图书馆信息服务与信息素养教育理论与实践研究》 香 春

新时期高校大学生安全教育问题与对策研究——评《新时代高校国家安全教育通论》 赵 昕

高质量发展视角下高校后勤管理创新模式探讨——评《高校后勤管理研究与探索》 邱祥国

网络媒介重塑文旅 IP 路径研究——评《文化和旅游 IP: 理论溯源与实践探索》 黄俊又, 努尔古丽·阿不都苏力

信息化时代传统音乐基础理论教学问题研究——评《中国传统音乐基础》 陈 辉

高校音乐教育专业钢琴教学方法探究——评《高校音乐教育专业钢琴教学法系统研究》 辛建芳

封面摄影

瞿塘峡红叶 图片购自汇图网

Basin Planning & River Lake Regulation

- Characterization index of jacking effect between Changjiang River and Poyang Lake *CHEN Lu, DENG Jinyun* (1)
- Influence of runoff on tidal wave deformation and propagation in tidal reaches of Changjiang River
..... *LUO Liang, XIE Chao, JIANG Chenjuan, YAN Shuchun* (6)
- Evolution characteristics of curved river channels with different boundaries under water – sediment variation conditions
..... *CHEN Yiming, QU Geng, ZHENG Chengtai, HU Chengwei, LUAN Hualong* (14)

Flood Control and Disaster Mitigation

- Controlled water level of Three Gorges Reservoir carrying out compensation dispatch to Chenglingji Area I :demand analysis and optimization condition *ZOU Qiang, HU Ting, XIAO Yangfan, RAO Guanghui, HE Xiaocong* (21)
- Research progress on flood disaster remote sensing monitoring and assessment based on CiteSpace
..... *SHI Qian, PENG Huanhua, XIA Haonan, TANG Zihan, CHEN Hao* (28)

Environment and Ecology

- Application of quantum dot spectral sensing technology in sewage system of Changjiang River Basin
..... *WANG Jiawei, ZHOU Tianshuo, HUO Xujia, CAO Qiming* (37)
- Management experience of typical rivers and lakes and its enlightenment to ecological protection of Changjiang River Basin *ZHOU Yu, WANG Dianchang, YU Tianxue, YE Sheng, RAN Qihua* (45)
- Optimization and action mechanism of composite conditioner for lake sludge dewatering and solidification
..... *WANG Longtao, XIA Xinxing* (51)
- Transformation mode of ecological products value in Yangtze River Delta Integrated Demonstration Zone
..... *LI Xiaoting, ZHU Hongwei, WANG Zhe* (60)
- River – lake connectivity and biological corridors restoration at Changjiang River Anhui reach
..... *LIU Honggao, XIONG Yu, LI Dewang, BAO Qilin, LIN Guoyi, CHU Tao* (69)
- Response of tree – ring growth to climatic factors in valley forest of Altai Mountain
..... *CAO Panqi, YE Mao, ZHAO Fanfan, ZHANG Kaili* (75)
- Bibliometric analysis of soil erosion study by machine learning
..... *LI Tongliang, LI Binbin, ZHANG Fengbao, SHI Fangying, YANG Mingyi, HE Qing* (82)

Hydrology and Water Resources

- Climatic causes of typical flooding years during main flood season in key areas of upper reaches of Changjiang River
..... *XING Wenhui, WANG Feilong, QIU Hui, SHI Yulong* (91)
- Application of optical flow radar extrapolation precipitation products for forecasting sudden heavy rainfall
..... *WEI Fan, TIAN Gang, XU Weili, LI Chunlong* (97)
- Analysis on spatial and temporal distribution characteristics of rainfall and designed rainstorm frequency in Wenchuan County *XIE Yajie, LIU Shuguang, ZHOU Zhengzheng* (105)
- Frequency analysis of 24 – hour extreme rainfall in Sichuan Province based on regional L – moments method
..... *HU Jing, WANG Shuairan, QIN Guanghua, LI Xiaodong, LAN Ping* (113)
- Long time series monitoring of water level change in Gaoyou Lake based on multi – source satellite data
..... *CHEN Jianru, XU Jia, WANG Dongmei* (120)

Geology and Survey

- Research progress on landslide engineering reinforcement and ecological slope protection measures in Three Gorges Reservoir area *LI Xinran, ZHANG Guirong, LIN Cheng, TAN Ruiqi*(127)
- Physical simulation study on influence of stratigraphic dip and lateral friction on landslides
..... *HE Wengang, ZHAO Yuanwen, HE Ming, YUAN Daxiong*(135)
- Monitoring and analysis of slope deformation in Wudongde Hydropower Station reservoir area based on InSAR
..... *BI Zihang, LI Sumin, YUAN Liwei, LIN Yu*(143)

Engineering and Construction

- Centrifugal model test study on underwater dumping – filling of earth – rock dam of Xinji Hydropower Station on Hanjiang River *LI Rui, ZHANG Fangtao, LI Bo, ZHANG Zhubin, YU Wei, HUANG Jiping*(151)
- Numerical simulation on unsteady flow in variable speed constant frequency hydraulic turbine under variable flow condition *MAO Cheng, SU Li, SHEN Chunhe, WEN Xiankui*(157)
- Shape design of right triangle measuring flume in U – shaped channel *QI Yubin*(162)

Experimental Research

- Development of similar materials for water – air coupling test for reservoir building in karst depressions
..... *TAI Shengping, CHEN Shiwan, ZHENG Kexun, SHEN Chunyong*(168)
- Research progress on durability of ultra – high engineered cementitious composites
..... *WANG Yupu, LI Jiazheng, SHI Yan*(175)
- Evolution mechanism of dry – wet cycle fracture in expansive soil under action of iron ion
..... *XIAO Guiyuan, ZHU Yaoqi, WANG Yanwei, XU Guangli, ZHANG Dajin*(184)
- Effect of drought and partial seepage on stability of expansive soil canal embankments
..... *XIE Lin, ZHANG Zhongyin, AI Dong, LYU Shizhan*(192)
- Model experiment on resist breakage design of tunnels crossing active fault
..... *CAO Jun, CUI Zhen, YAN Tianyou, LI Jianhe*(200)
- Centrifugal vibration model test of prestressed anchored slope subjected to earthquake load
..... *SHANG Jiayi, ZHAO Yufei, WANG Xiaogang, LI Linhao*(208)
- Research on shear damage model of rough soil – rock interface influenced by root
..... *LIU Zhenxian, DING Yu, XIA Zhenyao, PENG Boshi*(216)
- Influence of sample preparation by sand column method and shear rate on triaxial test of cohesive coarse – grained soil
..... *ZHANG Fuchen, WANG Pengcheng, ZHANG Qingjian, LI Yugui, YU Lei*(223)
- Effect of remolding conditions on mechanical properties of laterite
..... *RAN Yuling, YANG Xiujuan, BAI Wei, FAN Henghui, LI Ke*(229)

Operation Management

- Detection of abnormal values in dam safety monitoring data based on LV – DBSCAN algorithm
..... *DAI Ling, LI Shaolin, LIU Guangbiao, JI Chuanbo, DUAN Guoxue*(236)
- Water – head allocation in cascade hydropower stations with water – head connection
..... *ZHANG Ziping, XU Jiangsong, HUANG Di*(242)

EDITOR AND PUBLISHER

Yangtze River Editorial Department

EDITOR IN CHIEF

WU Daoxi

ADDRESS

1863 Liberation Ave. , Wuhan, 430010, P. R. China

SPONSOR

Changjiang Water Resources Commission,
Ministry of Water Resources, P. R. China

DISTRIBUTOR

China International Book Trading Corporation(GUOJI SHUDIAN)
P. O. Box 399, Beijing, China, Code No. M962