

中国科技核心期刊

中国科学引文数据库（CSCD）核心库来源期刊

ISSN 1672-643X

CN 61-1413/TV

水资源与水工程学报

JOURNAL OF WATER RESOURCES AND WATER ENGINEERING

SHUIZIYUAN YU SHUIGONGCHENG XUEBAO

(第31卷 第2期 Vol.31 No.2)

ISSN 1672-643X



9 771672 643208

主办 西北农林科技大学

主管 中华人民共和国教育部

2
2020

水 资 源 与 水 工 程 学 报

SHUIZIYUAN YU SHUIGONGCHENG XUEBAO

2020 年 第 31 卷 第 2 期(总第 150 期)

目 次

· 水文水资源 ·

- 新战略与规划工程下的黄河流域未来水资源配置格局研究 刘柏君, 彭少明, 崔长勇(1)
基于生态水力半径法的武江流域生态流量研究 高雪山, 刘树锋, 贾建辉, 关 帅(8)
蛇纹石 - 黏土复合颗粒除氟的动态实验研究 李喜林, 于晓婉, 曹 娟, 尚方方, 杜传洋, 马佳递(13)
丹江口水库非点源污染定量与控制研究进展 李亚娇, 张子航, 李家科, 郝改瑞(19)
云南高原岩溶区极端降水变化规律研究 曾学梅, 丁文荣(28)
靖边县水源地区域地下水环境变化研究 李欣艳, 陈 凯, 葛佳亮, 王 玮(36)
基于二维浅水方程的城市地面洪水演进数值模拟研究 冀永鹏, 张洪兴, 王运涛, 李 晋, 张明亮(42)
基于组合权重 - 理想区间法的河长制实施效果评价模型及应用研究 彭欣雨, 唐德善(50)
水库蓄水对水源地水环境的影响研究 刘小华, 魏炳乾, 黄 磊, 刘 星, 李杰伟, 刘艳梅(57)
赣江上游章水流域极端降水时空变化特征 刘裕辉, 刘惠英, 卢怡诗(65)
1960 - 2017 年北洛河下游冲淤变化特征及其成因分析 曹绮欣, 关 凯, 张冰洁, 包岁利(74)
基于超效率 DEA 模型的宁夏工业水资源利用效率研究 郑 乐, 杨法暄, 钱 会, 徐盼盼(81)
祖厉河河源区径流、泥沙对气候的响应研究 吕明侠, 王一博, 吴川东, 白 炜(87)
黑河中游张掖城区段水生态治理方案研究 卢小波, 吕生玺(95)
基于 MCW - 正态云模型的黑河流域突发水污染安全评价 马梦含, 靳春玲, 贡 力, 逯晔坤, 王 靖(103)
侏罗系煤层顶板涌水量动态变化及其形成机制分析 许成成, 许光泉, 张海涛(110)
南澳羊屿村围填海拆除工程对水环境的影响 徐婉明, 邓伟铸, 倪锦锋, 郑兆勇(115)
不同遮蔽条件下季节性积融雪过程差异规律对比研究 唐小雨, 高 凡(121)

· 水利水电工程 ·

- 分汊河段船闸扩建对已有建筑物运行影响及改善技术研究 李君涛, 冯小香, 王 鑫(129)
湘江长沙综合枢纽下游河段典型江心洲演变规律 隆院男, 夏涵韬, 蒋昌波, 李志威(134)
分汊河段河中布置船闸水沙碍航特性研究 普晓刚, 宋 辉, 金 辉, 范 婷, 闫 涛(142)
上覆粗粒土层对堤基管涌破坏的细观机制研究 黄海均, 毛海涛, 严新军, 侍克斌, 黄 风(147)
非均质河床双排桥墩局部冲刷数值模拟研究 段海澎, 刘 武, 朱大勇, 魏 松, 胡 甜(155)
用于潮流能双向发电的导流装置性能研究 陈 韶, 李国富, 刘晓杰(161)
深孔泄洪洞工作(闸)弧门下游水流空化特性分析 张逸军, 尹进步(168)
风场和吞吐流对洪泽湖流域的影响分析 刘翊竣, 徐国宾(174)

· 水工结构工程 ·

- 不同金属添加剂对沥青混合料路用性能及微波愈合特性的影响分析 马立杰, 杨春风, 孙吉书(179)
基于 Autobank 的湘江汛期某堤坝稳定性计算 姚纪华, 朱龔飞, 庄艳红, 廖 武, 贺文双, 何香建, 宋文杰(185)
碳化作用对水泥净浆中游离氯离子浓度的影响 江乐鑫, 杨梦娜, 柳俊哲, 林 楠(190)
基于 ACO - BP 神经网络的土石坝位移监测模型研究 茹秋瑾, 何自立, 杨军超, 李晓琳, 谭剑波(196)

· 岩土工程 ·

- 黏土介质膜效应室内试验研究新进展 郑九州, 张志红, 白顺果(202)
基于 HS - Small 本构模型的银川地区深基坑开挖 - 降水过程数值分析 张卫兵, 张刚柱, 韩自刚, 王 乐(211)
深埋高地应力引水隧洞节理围岩稳定性研究 李唱唱, 侍克斌, 姜海波(219)
季节冻土区含砂低液限黏土冻融过程试验研究 陈新瑞, 宋 玲, 孙 霏, 陈 鹏, 刘沛凯, 惠 强, 李鑫鑫, 吴 浩(225)

· 农业水土工程 ·

- TRMM 数据在京津冀地区干旱监测适用性研究 赵安周, 王冬利, 范倩倩, 王金杰(235)
基于偏差校正和三重组合分析的主、被动微波土壤湿度数据融合 江 渊, 王 文, 边增淦(243)
基于 MODIS 和 ERA - Interim 的安徽省地表蒸散发及其受植被覆盖度影响研究 许 敏, 江 鹏(253)

期刊基本参数: CN61 - 1413/TV * 1990 * b * A4 * 260 * zh * P * ¥30.00 * 1000 * 37 * 2020-04

责任编辑:聂源宏、高立洁

英文审校:李 敏、高立洁

Journal of Water Resources and Water Engineering

(Bimonthly)

Vol. 31 No 2. Apr. 2020

CONTENTS

Future water resources allocation pattern for the Yellow River Basin driven by strategy and projects	LIU Bojun, PENG Shaoming, CUI Changyong (1)
Research on ecological instream flow of Wujiang River Basin based on ecological hydraulic radius approach	GAO Xueshan, LIU Shufeng, JIA Jianhui, et al (8)
Dynamic experiments of fluoride removal of serpentine - clay composite particles	LI Xilin, YU Xiaowan, CAO Juan, et al (13)
Research progress on quantification and control of non-point source pollution in the Danjiang and Hanjiang River Basin	LI Yajiao, ZHANG Zihang, LI Jiake, et al (19)
Study on the variation characteristics of extreme precipitation events of karst area in Yunnan Plateau	ZENG Xuemei, DING Wenrong (28)
Groundwater environment change of water source area in Jingbian County	LI Xinyan, CHEN Kai, GE Jialiang, et al (36)
Numerical simulation of urban surface flood evolution based on two-dimensional shallow water equation	JI Yongpeng, ZHANG Hongxing, WANG Yuntao, et al (42)
The evaluation model and its application of the river chief system based on the combined weight - ideal interval method	PENG Xinyu, TANG Deshan (50)
Study on the influence of reservoir backwater on water environment of the affected water source area	LIU Xiaohua, WEI Bingqian, HUANG Lei, et al (57)
Spatial - temporal variation of the extreme precipitation events in Zhangshui River Basin in the upper reaches of Ganjiang	LIU Yuhui, LIU Huiying, LU Yishi (65)
The variation characteristics and cause of scouring and silting in the lower Beiluo River from 1960 to 2017	CAO Qixin, GUAN Kai, ZHANG Bingjie, et al (74)
Study on the utilization efficiency of industrial water resources in Ningxia based on super-efficiency DEA model	ZHENG Le, YANG Faxuan, QIAN Hui, et al (81)
Study on the response of runoff and sediment to climate change in the Zuli River source area	LÜ Mingxia, WANG Yibo, WU Chuandong, et al (87)
Research on water ecological management scheme of Zhangye urban section in the middle reaches of Heihe River	LU Xiaobo, LÜ Shengxi (95)
Safety assessment of water pollution emergencies in Heihe Catchment based on MCW - normal cloud model	MA Menghan, JIN Chunling, GONG Li, et al (103)
Dynamic change and formation mechanism analysis of water inflow in the roof of Jurassic Coal Seam	XU Chengcheng, XU Guangquan, ZHANG Haitao (110)
Impact of reclamation removal on water environment in Yangyu Village on Nan'ao Island	XU Wanming, DENG Weizhu, NI Jinfeng, et al (115)
Comparative study on the difference law of seasonal snowmelt process under different shading conditions	TANG Xiaoyu, GAO Fan (121)
Influence of ship lock extension over branching channel on existing structures and its improvement measures	LI Juntao, FENG Xiaoxiang, WANG Xin (129)
Evolution law of typical mid-channel bars in Xiang River below the Changsha Comprehensive Hydraulic Pivot	LONG Yuannan, XIA Hantao, JIANG Changbo, et al (134)
Study on the navigation-obstructing characteristics of water and sediment by the ship lock arranged in the middle of the river in a branching river	PU Xiaogang, SONG Hui, JIN Hui, et al (142)
Study on the meso-mechanism of piping damage to embankment foundation from overlying coarse grained soil layers	HUANG Haijun, MAO Haitao, YAN Xinjun, et al (147)
Numerical simulation for local scour around double-row bridge piers in uneven sandy riverbed	DUAN Haipeng, LIU Wu, ZHU Dayong, et al (155)
Study on the performance of the diversion device of tidal current bidirectional generation	CHEN Tao, LI Guofu, LIU Xiaojie (161)
Flow cavitation characteristics in the downstream of a service radial gate of a deep spillway tunnel	ZHANG Yijun, YIN Jinbu (168)
Effects of wind field and throughput flow on the flow field of Hongze Lake	LIU Yijun, XU Guobin (174)
Effect of different metal additives on road performance and microwave self-healing characteristics of asphalt mixtures	MA Lijie, YANG Chunfeng, SUN Jishu (179)
Flood season stability calculation of a dam in Xiangjiang River using Autobank	YAO Jihua, ZHU Yanfei, ZHUANG Yanhong, et al (185)
Effect of carbonation on the concentration of free chloride ions in cement paste	JIANG Lexin, YANG Mengna, LIU Junzhe, et al (190)
Research on earth - rock dam displacement monitoring model based on ACO - BP neural networks	RU Qiujiu, HE Zili, YANG Junchao, et al (196)
New progress of laboratory experiments on membrane behavior of clay membranes	ZHENG Jiuzhou, ZHANG Zhihong, BAI Shunguo (202)
Numerical analysis of the excavation - dewatering process of a deep foundation pit in Yinchuan area based on HS - Small constitutive model	ZHANG Weibing, ZHANG Gangzhu, HAN Zigang, et al (211)
Study on stability of jointed surrounding rock of a deep-lying diversion tunnel with high ground stress	LI Changchang, SHI Kebin, JIANG Haibo (219)
Experimental study on freeze - thaw process of sandy clay with low liquid limit in seasonal frozen soil region	CHEN Xinrui, SONG Ling, SUN Wen, et al (225)
Evaluating the applicability of TRMM data in monitoring drought events in Beijing - Tianjin - Hebei region	ZHAO Anzhou, WANG Dongli, FAN Qianqian, et al (235)
Data fusion of active and passive microwave soil moisture based on deviation correction and triple collocation analysis	JIANG Yuan, WANG Wen, BIAN Zenggan (243)
Study on the surface evapotranspiration and its responses to vegetation coverage of Anhui Province based on MODIS and ERA - Interim data	XU Min, JIANG Peng (253)

Serial parameters: CN61 - 1413/TV * 1990 * b * A4 * 260 * zh * P * ¥ 30.00 * 1000 * 37 * 2020-04