

《水资源保护》2020-2021年目录

2020年第1期

特约专家论坛

1. 李家科, 张兆鑫, 蒋春博, 等. 海绵城市生物滞留设施关键技术研究进展[J]. 水资源保护, 2020, 36(1):1-8 DOI:10.3880/j.issn.1004-6933.2020.01.001 [摘要(4945)] [PDF 342.48 K (7622)]
LI Jiake, ZHANG Zhaoxin, JIANG Chunbo, et al. Research progress on key technologies of bioretention facilities for sponge city construction[J]. Water Resources Protection, 2020, 36(1):1-8.
2. 孙才志, 郑靖伟. 基于MRIIO与SNA的中国水资源空间转移网络分析[J]. 水资源保护, 2020, 36(1):9-17 DOI:10.3880/j.issn.1004-6933.2020.01.002 [摘要(1762)] [PDF 2.39 M (1756)]
SUN Caizhi, ZHENG Jingwei. Analysis of China's water resources spatial transfer network based on MRIIO and SNA[J]. Water Resources Protection, 2020, 36(1):9-17.
3. 褚俊英, 王浩, 周祖昊, 等. 流域综合治理方案制定的基本理论及技术框架[J]. 水资源保护, 2020, 36(1):18-24 DOI:10.3880/j.issn.1004-6933.2020.01.003 [摘要(1478)] [PDF 2.25 M (1709)]
CHU Junying, WANG Hao, ZHOU Zuhao, et al. Basic theory and technical framework for formulation of integrated watershed management plan[J]. Water Resources Protection, 2020, 36(1):18-24.
4. 季永兴, 刘水芹. 苏州河水环境治理20年回顾与展望[J]. 水资源保护, 2020, 36(1):25-30 DOI:10.3880/j.issn.1004-6933.2020.01.004 [摘要(1611)] [PDF 7.28 M (1879)]
JI Yongxing, LIU Shuiqin. Review and prospect of Suzhou Creek water environment treatment in 20 years[J]. Water Resources Protection, 2020, 36(1):25-30.
5. 吴志勇, 侍恒, 何海, 等. 岔巴沟流域植被变化特征及其对水沙的影响[J]. 水资源保护, 2020, 36(1):31-37 DOI:10.3880/j.issn.1004-6933.2020.01.005 [摘要(2054)] [PDF 7.11 M (2469)]
WU Zhiyong, SHI Heng, HE Hai, et al. Characteristics of vegetation change and impact on runoff and sediment in Chabagou Watershed[J]. Water Resources Protection, 2020, 36(1):31-37.
6. 黄津辉, 王超, 范泽华. 天津市设计暴雨雨型的演变[J]. 水资源保护, 2020, 36(1):38-43 DOI:10.3880/j.issn.1004-6933.2020.01.006 [摘要(1604)] [PDF 4.68 M (1623)]
HUANG Jinhui, WANG Chao, FAN Zehua. Evolution of design rainfall pattern in Tianjin[J]. Water Resources

Protection, 2020, 36(1):38-43.

水资源

7. 唱彤, 酆建强, 金菊良, 等. 面向水流系统功能的多维度水资源承载力评价指标体系[J]. 水资源保护, 2020, 36(1):44-51 DOI:10.3880/j.issn.1004-6933.2020.01.007 [摘要(1481)] [PDF 469.12 K (1794)]
CHANG Tong, LI Jianqiang, JIN Juliang, et al. Multi-dimensional water resources carrying capacity evaluation index system for water flow system function[J]. Water Resources Protection, 2020, 36(1):44-51.

8. 夏帆, 陈莹, 窦明, 等. 水资源空间均衡系数计算方法及其应用[J]. 水资源保护, 2020, 36(1):52-57 DOI:10.3880/j.issn.1004-6933.2020.01.008 [摘要(1449)] [PDF 204.33 K (1599)]
XIA Fan, CHEN Ying, DOU Ming, et al. Calculation method and application of spatial equilibrium coefficient of water resources[J]. Water Resources Protection, 2020, 36(1):52-57.

9. 陆海明, 邹鹰, 孙金华, 等. 基于 SWMM 的铁心桥实验基地内涝防治效果模拟[J]. 水资源保护, 2020, 36(1):58-65 DOI:10.3880/j.issn.1004-6933.2020.01.009 [摘要(1353)] [PDF 4.72 M (1463)]
LU Haiming, ZOU Yin, SUN Jinhua, et al. Simulation of waterlogging control effect in Tiexinqiao experimental base based on SWMM[J]. Water Resources Protection, 2020, 36(1):58-65.

水环境

10. 林若兰, 卓文珊, 曾珂, 等. 不同风向对珠江东四口门盐水入侵的影响[J]. 水资源保护, 2020, 36(1):66-75 DOI:10.3880/j.issn.1004-6933.2020.01.010 [摘要(1436)] [PDF 5.59 M (1465)]
LIN Ruolan, ZHUO Wenshan, ZENG Ke, et al. Influence of different wind direction on saltwater intrusion in East four portals of Pearl River[J]. Water Resources Protection, 2020, 36(1):66-75.

11. 孙昕, 刘兴社, 李鹏飞, 等. 电机转速对文丘里混合充氧机工作性能的影响[J]. 水资源保护, 2020, 36(1):76-81 DOI:10.3880/j.issn.1004-6933.2020.01.011 [摘要(1310)] [PDF 2.65 M (1397)]
SUN Xin, LIU Xingshe, LI Pengfei, et al. Effect of motor speed on working performance of Vacuum-type mixed oxygenator[J]. Water Resources Protection, 2020, 36(1):76-81.

水生态

12. 杨威, 张婷婷, 孙雨琛, 等. 淮北采煤塌陷区两个小型湖泊轮虫的群落结构特征[J]. 水资源保护, 2020, 36(1):82-88 DOI:10.3880/j.issn.1004-6933.2020.01.012 [摘要(1269)] [PDF 2.10 M (1478)]
YANG Wei, ZHANG Tingting, SUN Yuchen, et al. Community structure of rotifer in two small lakes of Huabei

excavating coal subsidence region[J].Water Resources Protection, 2020, 36(1):82-88.

13. 马牧源, 崔丽娟, 张曼胤, 等. 白洋淀养鸭废水对生物膜生物量和胞外酶活性的影响[J]. 水资源保护, 2020, 36(1):89-96DOI:10.3880/j.issn.1004-6933.2020.01.013 [摘要(1466)][PDF 2.16 M (1527)]
MA Muyuan, CUI Lijuan, ZHANG Manyin, et al. Effects of duck wastewater from Baiyangdian Lake on biofilm biomass and extracellular enzyme activities[J].Water Resources Protection, 2020, 36(1):89-96.

2020 年第 2 期

特约专家论坛

1. 左其亭, 张志卓, 吴滨滨. 基于组合权重 TOPSIS 模型的黄河流域九省区水资源承载力评价[J]. 水资源保护, 2020, 36(2):1-7DOI:10.3880/j.issn.1004-6933.2020.02.001[摘要(4918)][PDF 1.59 M (5171)]
ZUO Qiting, ZHANG Zhizhuo, WU Binbin. Evaluation of water resources carrying capacity of nine provinces in Yellow River Basin based on combined weight TOPSIS model[J].Water Resources Protection, 2020, 36(2):1-7.

2. 侯俊, 裴佳琦, 黄喻威, 等. 基于鱼类需求的息县枢纽工程闸下河段环境流量研究[J]. 水资源保护, 2020, 36(2):8-12DOI:10.3880/j.issn.1004-6933.2020.02.002 [摘要(1393)][PDF 638.57 K (1353)]
HOU Jun, PEI Jiaqi, HUANG Yuwei, et al. Study on environmental flow of lower reach of Xi County hub project based on fish demand[J].Water Resources Protection, 2020, 36(2):8-12.

3. 彭虹, 黄攀攀, 张万顺, 等. 重庆市农业用水量与农业经济发展脱钩程度的时空变化[J]. 水资源保护, 2020, 36(2):13-20DOI:10.3880/j.issn.1004-6933.2020.02.003[摘要(1317)][PDF 6.57 M (1331)]
PENG Hong, HUANG Panpan, ZHANG Wanshun, et al. Spatial-temporal change characteristics of decoupling between agricultural water consumption and agricultural economic development in Chongqing[J].Water Resources Protection, 2020, 36(2):13-20.

4. 焦士兴, 王安周, 李青云, 等. 河南省城镇化与水资源耦合协调发展状况[J]. 水资源保护, 2020, 36(2):21-26DOI:10.3880/j.issn.1004-6933.2020.02.004[摘要(1274)] [PDF 2.23 M (1228)]
JIAO Shixing, WANG Anzhou, LI Qingyun, et al. Study on coupling and coordinated development of urbanization and water resources in Henan Province[J]. Water Resources Protection, 2020, 36(2):21-26.

水资源

5. 赵静, 胡庆芳, 王腊春, 等. 基于 MSWEP 数据的太湖流域降水特性分析[J]. 水资源保护, 2020, 36(2):27-33DOI:10.3880/j.issn.1004-6933.2020.02.005 [摘要(1591)][PDF 10.25 M (1188)]

ZHAO Jing, HU Qingfang, WANG Lachun, et al. Analysis of precipitation characteristics in Taihu Lake Basin based on MSWEP[J]. Water Resources Protection, 2020, 36(2):27-33.

6. 翟慧敏, 程启先, 李书覃, 等. 海绵城市理念演变的知识图谱可视化分析[J]. 水资源保护, 2020, 36(2):34-40 DOI:10.3880/j.issn.1004-6933.2020.02.006 [摘要(1244)] [PDF 3.94 M (1009)]

ZHAI Huimin, CHENG Qixian, LI Shuqin, et al. Visual analysis of knowledge map of sponge city concept evolution[J]. Water Resources Protection, 2020, 36(2):34-40.

7. 张轩, 张行南, 江唯佳, 等. 秦淮河流域东山站水位预报研究[J]. 水资源保护, 2020, 36(2):41-46 DOI:10.3880/j.issn.1004-6933.2020.02.007 [摘要(1241)] [PDF 2.32 M (1128)]

ZHANG Xuan, ZHANG Xingnan, JIANG Weijia, et al. Study on water level forecast of Dongshan Station in Qinhuai River Basin[J]. Water Resources Protection, 2020, 36(2):41-46.

8. 赵昀皓, 邢万秋, 傅健宇. 基于概率性 Budyko 方程的我国可利用水资源量脆弱性评估[J]. 水资源保护, 2020, 36(2):47-52 DOI:10.3880/j.issn.1004-6933.2020.02.008 [摘要(1144)] [PDF 5.09 M (1048)]

ZHAO Yunhao, XING Wanqiu, FU Jianyu. Evaluation of vulnerability of water availability in China based on probabilistic Budyko equation[J]. Water Resources Protection, 2020, 36(2):47-52.

9. 张志君, 陈伏龙, 龙爱华, 等. 基于模糊集对分析法的新疆水资源安全评价[J]. 水资源保护, 2020, 36(2):53-58 DOI:10.3880/j.issn.1004-6933.2020.02.009 [摘要(1343)] [PDF 426.76 K (995)]

ZHANG Zhijun, CHEN Fulong, LONG Aihua, et al. Xinjiang water resources security evaluation based on fuzzy set pair analysis[J]. Water Resources Protection, 2020, 36(2):53-58.

水环境

10. 韩剑宏, 郭金越, 张连科, 等. 生物炭/铁酸锰对 Zn^{2+} 和 Cu^{2+} 的吸附性能试验[J]. 水资源保护, 2020, 36(2):59-64 DOI:10.3880/j.issn.1004-6933.2020.02.010 [摘要(1250)] [PDF 3.34 M (1056)]

HAN Jianhong, GUO Jinyue, ZHANG Lianke, et al. Adsorption test of biochar-MnFe₂O₄ to Zn^{2+} and Cu^{2+} [J]. Water Resources Protection, 2020, 36(2):59-64.

11. 吴涛, 王建波, 杨洁, 等. 大黑汀水库水质时空变化特征及下游引水策略[J]. 水资源保护, 2020, 36(2):65-72 DOI:10.3880/j.issn.1004-6933.2020.02.011 [摘要(1036)] [PDF 5.27 M (992)]

WU Tao, WANG Jianbo, YANG Jie, et al. Spatio-temporal characteristics of water quality in Daheiting Reservoir and downstream water transfer strategy[J]. Water Resources Protection, 2020, 36(2):65-72.

12. 李志清, 吴苏舒, 诸晓华, 等. 石臼湖表层沉积物营养盐与重金属分布及污染评价[J]. 水资源保护, 2020, 36(2):73-78 DOI:10.3880/j.issn.1004-6933.2020.02.012 [摘要(1198)] [PDF 3.34 M (1063)]
LI Zhiqing, WU Sushu, ZHU Xiaohua, et al. Distribution of nutrients and heavy metals in surface sediments of Shijiu Lake and its pollution assessment[J]. Water Resources Protection, 2020, 36(2):73-78.
13. 周及, 关卫省, 付林涛. 基于多元统计的西安市河流水质评价及污染源解析[J]. 水资源保护, 2020, 36(2):79-84 DOI:10.3880/j.issn.1004-6933.2020.02.013 [摘要(1197)] [PDF 573.09 K (1165)]
ZHOU Ji, GUAN Weisheng, FU Lintao. Water quality assessment and pollution source analysis of Xi'an river based on multivariate statistics[J]. Water Resources Protection, 2020, 36(2):79-84.
14. 陆玮, 李兆, 骆祖江. 南通市地下水压缩开采对水质咸化的控制效应[J]. 水资源保护, 2020, 36(2):85-91 DOI:10.3880/j.issn.1004-6933.2020.02.014 [摘要(1207)] [PDF 7.94 M (1045)]
LU Wei, LI Zhao, LUO Zujiang. Control effect of groundwater compression mining on water salinization in Nantong City[J]. Water Resources Protection, 2020, 36(2):85-91.
15. 李扬, 孙翀, 刘涵希. 福建省域河流生态流量监管与控制目标核定[J]. 水资源保护, 2020, 36(2):92-96 DOI:10.3880/j.issn.1004-6933.2020.02.015 [摘要(1293)] [PDF 212.43 K (1050)]
LI Yang, SUN Chong, LIU Hanxi. Supervision of river ecological flow and verification of control objectives in Fujian Province[J]. Water Resources Protection, 2020, 36(2):92-96.
16. 黄霄, 雷晓云, 高凡, 等. 奎屯河流域健康评价[J]. 水资源保护, 2020, 36(2):97-104 DOI:10.3880/j.issn.1004-6933.2020.02.016 [摘要(1176)] [PDF 1.09 M (1041)]
HUANG Xiao, LEI Xiaoyun, GAO Fan, et al. Watershed health assessment of Kuitun River Basin[J]. Water Resources Protection, 2020, 36(2):97-104.

2020年第3期

特约专家论坛

1. 严登华, 王浩, 周梦, 等. 全球治水模式思辨与发展展望[J]. 水资源保护, 2020, 36(3):1-7 DOI:10.3880/j.issn.1004-6933.2020.03.001 [摘要(4535)] [PDF 318.03 K (5808)]
YAN Denghua, WANG Hao, ZHOU Meng, et al. Scientific ideas and development prospects of global water management modes[J]. Water Resources Protection, 2020, 36(3):1-7.
2. 王卫光, 黄茵, 邢万秋, 等. 基于 SPEI 的海河流域干旱时空演变特征及环流成因分析[J]. 水资源保

护, 2020, 36(3):8-13DOI:10.3880/j.issn.1004-6933.2020.03.002[摘要(1381)][PDF 6.31 M (1410)]

WANG Weiguang, HUANG Yin, XING Wanqiu, et al. Analysis of spatial and temporal evolution characteristics and circulation causes of drought in Haihe River Basin based on SPEI[J]. Water Resources Protection, 2020, 36(3):8-13.

水事观察

3. 夏青. 让美丽中国建设评估指标体系更美丽[J]. 水资源保

护, 2020, 36(3):14DOI:10.3880/j.issn.1004-6933.2020.03.003[摘要(1233)][PDF 104.92 K (1763)]

XIA Qing. Make evaluation index system of beautiful China construction more beautiful[J]. Water Resources Protection, 2020, 36(3):14.

水资源

4. 曾家俊, 麦叶鹏, 李志威, 等. 广州天河智慧城 SWMM 参数敏感性分析[J]. 水资源保

护, 2020, 36(3):15-21DOI:10.3880/j.issn.1004-6933.2020.03.004 [摘要(1484)][PDF 1.65 M (1935)]

ZENG Jiajun, MAI Yepeng, LI Zhiwei, et al. Sensitivity analysis of SWMM parameters in Guangzhou Tianhe wisdom city[J]. Water Resources Protection, 2020, 36(3):15-21.

5. 陈紫阳, 胡庆芳, 雍斌, 等. 基于快速傅里叶变换的降水空间变异函数有效性验证[J]. 水资源保

护, 2020, 36(3):22-27DOI:10.3880/j.issn.1004-6933.2020.03.005[摘要(1153)][PDF 3.86 M (1274)]

CHEN Ziyang, HU Qingfang, YONG Bin, et al. Validation of precipitation spatial variogram based on fast Fourier transformation[J]. Water Resources Protection, 2020, 36(3):22-27.

6. 俞彦, 张行南, 张鹏, 等. 基于 SCS 模型和新安江模型的雨量预警指标综合动态阈值对比[J]. 水资源保

护, 2020, 36(3):28-33DOI:10.3880/j.issn.1004-6933.2020.03.006[摘要(1187)][PDF 2.77 M (1861)]

YU Yan, ZHANG Xingnan, ZHANG Peng, et al. Comparison of comprehensive dynamic threshold of rainfall warning indicators based on SCS model and Xin'anjiang model[J]. Water Resources Protection, 2020, 36(3):28-33.

7. 胥瑞晨, 逢勇, 胡祉冰, 等. 太湖水龄与水力停留时间关系及参数敏感性[J]. 水资源保

护, 2020, 36(3):34-39DOI:10.3880/j.issn.1004-6933.2020.03.007 [摘要(1309)] [PDF 2.69 M (1896)]

XU Ruichen, PANG Yong, HU Zhibing, et al. Relationship between water age and hydraulic residence time in Taihu Lake and parameter sensitivity[J]. Water Resources Protection, 2020, 36(3):34-39.

水环境

8. 吴波, 赵越, 陈岩, 等. 昆明市水代谢系统中的水质代谢状况评估[J]. 水资源保护, 2020, 36(3):40-45 DOI:10.3880/j.issn.1004-6933.2020.03.008 [摘要(1252)][PDF 1.26 M (1564)]
WU Bo, ZHAO Yue, CHEN Yan, et al. Assessment of water quality metabolism in water metabolism system of Kunming City[J]. Water Resources Protection, 2020, 36(3):40-45.

9. 冯亚坤, 张伟, 左其亭, 等. “一带一路”沿线中欧国家地表水环境污染状况分析[J]. 水资源保护, 2020, 36(3):46-51 DOI:10.3880/j.issn.1004-6933.2020.03.009 [摘要(1431)][PDF 975.60 K (2806)]
FENG Yakun, ZHANG Wei, ZUO Qiting, et al. Analysis of surface water pollution in Central European countries along “Belt and Road” [J]. Water Resources Protection, 2020, 36(3):46-51.

10. 周石磊, 孙悦, 黄廷林, 等. 周村水库大气湿沉降氮磷及溶解性有机物特征[J]. 水资源保护, 2020, 36(3):52-59 DOI:10.3880/j.issn.1004-6933.2020.03.010 [摘要(1178)][PDF 1.83 M (1549)]
ZHOU Shilei, SUN Yue, HUANG Tinglin, et al. Characteristics of nitrogen, phosphorus and dissolved organic matter in atmospheric wet deposition of Zhoucun Reservoir[J]. Water Resources Protection, 2020, 36(3):52-59.

11. 付超, 苏晶, 赵海萍, 等. 基于 GIS 的漳河上游城市非点源污染负荷估算[J]. 水资源保护, 2020, 36(3):60-66 DOI:10.3880/j.issn.1004-6933.2020.03.011 [摘要(1297)][PDF 9.02 M (1592)]
FU Chao, SU Jing, ZHAO Haiping, et al. Estimation of urban non-point source pollution load in upper reaches of Zhanghe River based on GIS[J]. Water Resources Protection, 2020, 36(3):60-66.

12. 朱晓琳, 李一平, 许益新, 等. 时间尺度对平原感潮河网水动力水质模拟精度的影响[J]. 水资源保护, 2020, 36(3):67-75 DOI:10.3880/j.issn.1004-6933.2020.03.012 [摘要(1187)][PDF 8.33 M (1609)]
ZHU Xiaolin, LI Yiping, XU Yixin, et al. Effects of time scale on simulation accuracy of hydrodynamic water quality of plain tidal river network[J]. Water Resources Protection, 2020, 36(3):67-75.

13. 王凯, 李一平, 赖秋英, 等. 沿海地区污水处理厂雨水混入率对设计规模的影响[J]. 水资源保护, 2020, 36(3):76-82 DOI:10.3880/j.issn.1004-6933.2020.03.013 [摘要(1184)][PDF 3.15 M (1290)]
WANG Kai, LI Yiping, LAI Qiuying, et al. Influence of rainwater mixing rate on design scale of sewage treatment plant in coastal area[J]. Water Resources Protection, 2020, 36(3):76-82.

水生态

14. 张松贺, 周甜甜, 刘远思. 新开河 4 种水生植物表面附着微生物群落特征[J]. 水资源保护, 2020, 36(3):83-88 DOI:10.3880/j.issn.1004-6933.2020.03.014 [摘要(1259)][PDF 4.62 M (1347)]

ZHANG Songhe, ZHOU Tiantian, LIU Yuansi. Characteristics of microbial communities in biofilm of four aquatic macrophytes in Xinkai River[J]. Water Resources Protection, 2020, 36(3):83-88.

15. 王琦, 刘高慧, 肖能文, 等. 不同生物联合对滇池草海水质的净化作用[J]. 水资源保护, 2020, 36(3):89-97 DOI:10.3880/j.issn.1004-6933.2020.03.015 [摘要(1149)] [PDF 271.34 K (1609)]
WANG Qi, LIU Gaohui, XIAO Nengwen, et al. Purification effect of combination of different organisms on water quality of Caohai of Dianchi Lake[J]. Water Resources Protection, 2020, 36(3):89-97.

16. 罗凡, 李一平, 李燕, 等. 桉树人工林对林区水库黑水的影响[J]. 水资源保护, 2020, 36(3):98-104 DOI:10.3880/j.issn.1004-6933.2020.03.016 [摘要(1396)] [PDF 630.31 K (1916)]
LUO Fan, LI Yiping, LI Yan, et al. Effects of Eucalyptus plantation on black water in forest reservoirs[J]. Water Resources Protection, 2020, 36(3):98-104.

2020年第4期

特约专家论坛

1. 吴志勇, 徐梁, 唐运忆, 等. 水文站流量在线监测方法研究进展[J]. 水资源保护, 2020, 36(4):1-7 DOI:10.3880/j.issn.1004-6933.2020.04.001 [摘要(3984)] [PDF 284.41 K (5685)]
WU Zhiyong, XU Liang, TANG Yunyi, et al. Research progress of on-line discharge monitoring methods in hydrometry stations[J]. Water Resources Protection, 2020, 36(4):1-7.

2. 侯俊, 黄喻威, 苗令占, 等. 基于鱼类栖息地需求的雅鲁藏布江中游环境流量计算[J]. 水资源保护, 2020, 36(4):8-12 DOI:10.3880/j.issn.1004-6933.2020.04.002 [摘要(1127)] [PDF 1.90 M (1306)]
HOU Jun, HUANG Yuwei, MIAO Lingzhan, et al. Calculating environmental flows in middle reach of Yarlung Tsangpo River based on fish habitat requirements[J]. Water Resources Protection, 2020, 36(4):8-12.

3. 刘凌, 朱燕, 李博韬, 等. 基于MBFG分类法的长江江苏段浮游植物生物完整性评价[J]. 水资源保护, 2020, 36(4):13-20 DOI:10.3880/j.issn.1004-6933.2020.04.003 [摘要(966)] [PDF 1.37 M (1461)]
LIU Ling, ZHU Yan, LI Botao, et al. Assessment of phytoplankton biological integrity in Jiangsu section of Yangtze River based on MBFG[J]. Water Resources Protection, 2020, 36(4):13-20.

4. 赵衡, 闫旭, 王富强, 等. 基于PSR模型的三门峡库区湿地生态系统健康评价[J]. 水资源保护, 2020, 36(4):21-25 DOI:10.3880/j.issn.1004-6933.2020.04.004 [摘要(927)] [PDF 1.04 M (697)]
ZHAO Heng, YAN Xu, WANG Fuqiang, et al. Assessment on ecosystem health of Sanmenxia Reservoir wetland based on PSR model[J]. Water Resources Protection, 2020, 36(4):21-25.

5. 牛明香, 王俊. 基于 Landsat 遥感影像的黄河三角洲东营段海岸线变化分析[J]. 水资源保护, 2020, 36(4):26-33DOI:10.3880/j.issn.1004-6933.2020.04.005[摘要(905)][PDF 5.81 M (1382)]
NIU Mingxiang, WANG Jun. Analysis of coastline variations in Dongying section of Yellow River Delta based on Landsat remote sensing image[J]. Water Resources Protection, 2020, 36(4):26-33.

6. 贡力, 王婧, 靳春玲, 等. 基于和谐论的黄河兰州段河道采砂影响评价[J]. 水资源保护, 2020, 36(4):34-39DOI:10.3880/j.issn.1004-6933.2020.04.006[摘要(799)][PDF 294.80 K (457)]
GONG Li, WANG Jing, JIN Chunling, et al. Impact assessment of river sand mining in Lanzhou reach of Yellow River based on harmony theory[J]. Water Resources Protection, 2020, 36(4):34-39.

7. 刘修英, 黄功学, 郑志宏, 等. 贾鲁河郑州段水质评价和污染源解析[J]. 水资源保护, 2020, 36(4):40-46DOI:10.3880/j.issn.1004-6933.2020.04.007[摘要(1033)][PDF 1.09 M (2388)]
LIU Xiuying, HUANG Gongxue, ZHENG Zhihong, et al. Water quality evaluation and pollution source apportionment to Zhengzhou section of Jialu River[J]. Water Resources Protection, 2020, 36(4):40-46.

水资源

8. 黄显峰, 石志康, 金国裕, 等. 基于碳足迹的区域水资源优化配置模型[J]. 水资源保护, 2020, 36(4):47-51DOI:10.3880/j.issn.1004-6933.2020.04.008[摘要(1057)][PDF 982.07 K (1113)]
HUANG Xianfeng, SHI Zhikang, JIN Guoyu, et al. Optimal regional water resources allocation model based on carbon footprint[J]. Water Resources Protection, 2020, 36(4):47-51.

9. 杨志, 冯民权. 基于图论的强人工干扰流域综合连通性量化的改进方法[J]. 水资源保护, 2020, 36(4):52-59DOI:10.3880/j.issn.1004-6933.2020.04.009[摘要(884)][PDF 3.12 M (750)]
YANG Zhi, FENG Minquan. An improved method based on graph theory to quantify comprehensive connectivity of basins with strong artificial disturbance[J]. Water Resources Protection, 2020, 36(4):52-59.

10. 高玉琴, 周桐, 马真臻, 等. 考虑天然水文情势的水库调度图优化[J]. 水资源保护, 2020, 36(4):60-67DOI:10.3880/j.issn.1004-6933.2020.04.010[摘要(938)][PDF 2.38 M (468)]
GAO Yuqin, ZHOU Tong, MA Zhenzhen, et al. Optimization of reservoir operation chart considering natural hydrological regime[J]. Water Resources Protection, 2020, 36(4):60-67.

11. 尹小玲, 赵雪峰, 黄舒琴, 等. 分层型河口咸水上溯对径流潮汐共同作用的基本响应[J]. 水资源保护, 2020, 36(4):68-74DOI:10.3880/j.issn.1004-6933.2020.04.011[摘要(807)][PDF 3.92 M (721)]

YIN Xiaoling, ZHAO Xuefeng, HUANG Shuqin, et al. Basic response of saline water intrusion on combined action of runoff and tide in stratified estuary[J]. Water Resources Protection, 2020, 36(4):68-74.

12. 张泳华, 刘祖发, 赵铜铁钢, 等. 东江流域基流变化特征及影响因素[J]. 水资源保护, 2020, 36(4):75-81 DOI:10.3880/j.issn.1004-6933.2020.04.012 [摘要(1001)] [PDF 2.24 M (1238)]

ZHANG Yonghua, LIU Zufa, ZHAO Tongtiegang, et al. Variation characteristics and influencing factors of base flow in Dongjiang River Basin[J]. Water Resources Protection, 2020, 36(4):75-81.

13. 范嘉炜, 黄锦林, 袁明道, 等. 广州市用水结构空间均衡差异性分析[J]. 水资源保护, 2020, 36(4):82-86 DOI:10.3880/j.issn.1004-6933.2020.04.013 [摘要(1006)] [PDF 1.57 M (924)]

FAN Jiawei, HUANG Jinlin, YUAN Mingdao, et al. Analysis of spatial equilibrium of water consumption structure in Guangzhou City[J]. Water Resources Protection, 2020, 36(4):82-86.

14. 唐洪根, 周廷璋, 辛沛. 淤积刺激下滨海湿地植物根系吸水及土壤水分变化[J]. 水资源保护, 2020, 36(4):87-92 DOI:10.3880/j.issn.1004-6933.2020.04.014 [摘要(974)] [PDF 2.41 M (998)]

TANG Honggen, ZHOU Tingzhang, XIN Pei. Stimulation of sediment deposition to root water uptake and soil water change in wetland near sea[J]. Water Resources Protection, 2020, 36(4):87-92.

水环境

15. 梁志宏, 陈秀洪, 罗欢, 等. 深圳湾水质时空分布特征及污染源解析[J]. 水资源保护, 2020, 36(4):93-99 DOI:10.3880/j.issn.1004-6933.2020.04.015 [摘要(1202)] [PDF 15.12 M (746)]

LIANG Zhihong, CHEN Xiuhong, LUO Huan, et al. Spatio-temporal distribution characteristics of water quality in Shenzhen Bay and pollution source analysis[J]. Water Resources Protection, 2020, 36(4):93-99.

16. 毛新伟, 仵荟颖, 徐枫. 太湖底泥主要营养物质污染特征分析[J]. 水资源保护, 2020, 36(4):100-104 DOI:10.3880/j.issn.1004-6933.2020.04.016 [摘要(931)] [PDF 1.45 M (1195)]

MAO Xinwei, WU Huiying, XU Feng. Analysis of pollution characteristics of main nutrients in Taihu Lake sediment[J]. Water Resources Protection, 2020, 36(4):100-104.

2020年第5期

特约专家论坛

1. 王沛芳, 娄明月, 钱进, 等. 农田退水净污湿地对污染物的净化效果及机理分析[J]. 水资源保护, 2020, 36(5):1-10 DOI:10.3880/j.issn.1004-6933.2020.05.001 [摘要(2007)] [PDF 4.09 M (1642)]

WANG Peifang, LOU Mingyue, QIAN Jin, et al. Analysis of purification effect and mechanism of pollutant by the farmland drainage wetland[J]. Water Resources Protection, 2020, 36(5):1-10.

2. 马明卫, 韩宇平, 严登华, 等. 特大干旱事件灾害孕育机理及影响研究进展[J]. 水资源保护, 2020, 36(5):11-21 DOI:10.3880/j.issn.1004-6933.2020.05.002[摘要(703)][PDF 1.53 M (412)]
MA Mingwei, HAN Yuping, YAN Denghua, et al. Research progress on the mechanism and influence of extreme drought-induced disasters[J]. Water Resources Protection, 2020, 36(5):11-21.

水事观察

3. 夏青. 城镇污水处理厂污染物排放标准修改完善的思考[J]. 水资源保护, 2020, 36(5):22-23 DOI:10.3880/j.issn.1004-6933.2020.05.003[摘要(679)][PDF 87.39 K (372)]. Thoughts on revision and perfection of pollutant discharge standards for urban sewage treatment plants[J]. Water Resources Protection, 2020, 36(5):22-23.

黄河流域高质量发展

4. 刘建华, 黄亮朝. 黄河下游水资源利用与高质量发展关联评估[J]. 水资源保护, 2020, 36(5):24-30 DOI:10.3880/j.issn.1004-6933.2020.05.004[摘要(642)][PDF 1.91 M (396)]
XIA Qing, HUANG Liangchao. Evaluation of correlation between water resources utilization and high-quality development in the lower reaches of the Yellow River[J]. Water Resources Protection, 2020, 36(5):24-30.

5. 武见, 明广辉, 周翔南, 等. 黄河流域需水分层预测[J]. 水资源保护, 2020, 36(5):31-37 DOI:10.3880/j.issn.1004-6933.2020.05.005[摘要(676)][PDF 1.49 M (410)]
WU Jian, MING Guanghui, ZHOU Xiangnan, et al. Forecasting of water demand hierachy in the Yellow River Basin[J]. Water Resources Protection, 2020, 36(5):31-37.

6. 余真真, 闫莉, 王瑞玲, 等. 多目标协控下伊洛河自净需水流量研究[J]. 水资源保护, 2020, 36(5):38-42 DOI:10.3880/j.issn.1004-6933.2020.05.006[摘要(704)][PDF 1.49 M (346)]
YU Zhenzhen, YAN Li, WANG Ruiling, et al. Study on self-purification water demand flow in the Yiluo River under multi-objective coordination control[J]. Water Resources Protection, 2020, 36(5):38-42.

水资源

7. 袁绍春, 王怀鋈, 吕波, 等. 基于 InfoWorks_ICM 模型的山地城市老旧小区海绵化改造方案设计及评估[J]. 水资源保护, 2020, 36(5):43-49 DOI:10.3880/j.issn.1004-6933.2020.05.007[摘要(679)][PDF 7.41 M (381)]
YUAN Shaochun, WANG Huaijun, LYU Bo, et al. Design and evaluation of sponge city reconstruction scheme for old building district in mountainous city based on InfoWorks_ICM model[J]. Water Resources

Protection, 2020, 36(5):43-49.

8. 陶然, 张珂. 基于 PDSI 的 1982—2015 年我国气象干旱特征及时空变化分析[J]. 水资源保护, 2020, 36(5):50-56 DOI:10.3880/j.issn.1004-6933.2020.05.008 [摘要(765)] [PDF 5.30 M (1133)]
TAO Ran, ZHANG Ke. PDSI-based analysis of characteristics and spatiotemporal changes of meteorological drought in China from 1982 to 2015[J]. Water Resources Protection, 2020, 36(5):50-56.

9. 岳伟鹏, 张合理, 陈峰, 等. 中亚瓦赫什河上游源区气候水文要素演变特征[J]. 水资源保护, 2020, 36(5):57-64 DOI:10.3880/j.issn.1004-6933.2020.05.009 [摘要(724)] [PDF 5.71 M (431)]
YUE Weipeng, ZHANG Heli, CHEN Feng, et al. Evolution characteristics of climatic and hydrological elements in the upper source area of the Vakhsh River, Central Asia[J]. Water Resources Protection, 2020, 36(5):57-64.

10. 李紫群, 孙慧兰, 周洪华, 等. 基于雪岭云杉树轮的阿克苏河干流冬季径流重建[J]. 水资源保护, 2020, 36(5):65-70 DOI:10.3880/j.issn.1004-6933.2020.05.010 [摘要(584)] [PDF 2.24 M (331)]
LI Ziqun, SUN Huilan, ZHOU Honghua, et al. Reconstruction of Aksu River main stream winter runoff based on tree ring chronology of *Picea schrenkiana*[J]. Water Resources Protection, 2020, 36(5):65-70.

水环境

11. 杜云彬, 陈求稳, 王智源, 等. 江苏省典型湖泊饮用水源地安全综合评价[J]. 水资源保护, 2020, 36(5):71-78 DOI:10.3880/j.issn.1004-6933.2020.05.011 [摘要(743)] [PDF 1.29 M (333)]
DU Yunbin, CHEN Qiuwen, WANG Zhiyuan, et al. Safety evaluation of typical lake drinking water sources in Jiangsu Province[J]. Water Resources Protection, 2020, 36(5):71-78.

12. 张伊佳, 陈星, 许钦, 等. 太湖下游河网区水质变化特征与引水调控效果[J]. 水资源保护, 2020, 36(5):79-86 DOI:10.3880/j.issn.1004-6933.2020.05.012 [摘要(643)] [PDF 6.41 M (335)]
ZHANG Yijia, CHEN Xing, XU Qin, et al. Characteristics of water quality change in the downstream river network area of Taihu Lake and effect of water diversion control[J]. Water Resources Protection, 2020, 36(5):79-86.

13. 王忠慧, 贡力, 康春涛, 等. 基于 BAS 算法的河渠突发水污染溯源[J]. 水资源保护, 2020, 36(5):87-92 DOI:10.3880/j.issn.1004-6933.2020.05.013 [摘要(659)] [PDF 483.18 K (406)]
WANG Zhonghui, GONG Li, KANG Chuntao, et al. Tracing source of sudden water pollution in rivers and canals based on BAS algorithm[J]. Water Resources Protection, 2020, 36(5):87-92.

14. 汪生斌, 祁泽学, 王万平, 等. 格尔木河水化学特征及成因[J]. 水资源保护, 2020, 36(5):93-98DOI:10.3880/j.issn.1004-6933.2020.05.014[摘要(627)][PDF 2.75 M (379)]
WANG Shengbin, QI Zexue, WANG Wanping, et al. Hydrochemical characteristics and causes of formation of the Golmud River[J]. Water Resources Protection, 2020, 36(5):93-98.

15. 张笛, 田鑫, 吴师. 南淝河污染通量解析与治理[J]. 水资源保护, 2020, 36(5):99-103DOI:10.3880/j.issn.1004-6933.2020.05.015[摘要(677)][PDF 396.53 K (400)]
ZHANG Di, TIAN Xin, WU Shi. Analysis of pollution flux in the Nanfeihe River and its treatment[J]. Water Resources Protection, 2020, 36(5):99-103.

16. 邓天天, 李晗晟, 徐赵高龙, 等. 载镧改性凹凸棒土对水中 As(III) 的吸附特性[J]. 水资源保护, 2020, 36(5):104-112DOI:10.3880/j.issn.1004-6933.2020.05.016[摘要(661)][PDF 5.17 M (416)]
DENG Tiantian, LI Hansheng, XU Zhaogaolong, et al. Adsorption properties of lanthanum modified attapulgite on As(III) in water[J]. Water Resources Protection, 2020, 36(5):104-112.

2020 年第 6 期

特约专家论坛

1. 黄国如, 罗海婉, 卢鑫祥, 等. 城市洪涝灾害风险分析与区划方法综述[J]. 水资源保护, 2020, 36(6):1-6DOI:10.3880/j.issn.1004-6933.2020.06.001[摘要(1604)][PDF 378.31 K (1364)]
HUANG Guoru, LUO Haiwan, LU Xinxiang, et al. Study on risk analysis and zoning method of urban flood disaster[J]. Water Resources Protection, 2020, 36(6):1-6.

2. 成智文, 耿康, 陈晓薇, 等. 雨水径流颗粒物对陶瓷透水砖堵塞的影响[J]. 水资源保护, 2020, 36(6):7-11DOI:10.3880/j.issn.1004-6933.2020.06.002[摘要(696)][PDF 638.24 K (418)]
CHENG Zhiwen, GENG Kang, CHEN Xiaowei, et al. Impacts of rainwater runoff particles on clogging of ceramic permeable brick[J]. Water Resources Protection, 2020, 36(6):7-11.

黄河流域高质量发展

3. 王慧亮, 申言霞, 李卓成, 等. 基于能值理论的黄河流域水资源生态经济系统可持续性评价[J]. 水资源保护, 2020, 36(6):12-17DOI:10.3880/j.issn.1004-6933.2020.06.003[摘要(864)][PDF 298.31 K (467)]
WANG Huiliang, SHEN Yanxia, LI Zhuocheng, et al. Sustainability assessment of water resources ecological-economic system in the Yellow River Basin based on emergy theory[J]. Water Resources Protection, 2020, 36(6):12-17.

4. 杨玉霞, 闫莉, 韩艳利, 等. 基于流域尺度的黄河水生态补偿机制[J]. 水资源保护, 2020, 36(6):18-23DOI:10.3880/j.issn.1004-6933.2020.06.004[摘要(730)][PDF 235.00 K (523)]

YANG Yuxia, YAN Li, HAN Yanli, et al. Compensation mechanism of the Yellow River water ecology based on watershed scale[J]. Water Resources Protection, 2020, 36(6):18-23.

5. 孟望生, 邵芳琴. 黄河流域环境规制和产业结构对绿色经济增长效率的影响[J]. 水资源保护, 2020, 36(6):24-30 DOI:10.3880/j.issn.1004-6933.2020.06.005 [摘要(690)] [PDF 276.52 K (482)]

MENG Wangsheng, SHAO Fangqin. Influence of environmental regulation and industrial structure on the growth efficiency of green economy in the Yellow River Basin[J]. Water Resources Protection, 2020, 36(6):24-30.

6. 郑从奇, 武玮, 魏杰, 等. 黄河下游支流大汶河鱼类多样性及影响因子分析[J]. 水资源保护, 2020, 36(6):31-38 DOI:10.3880/j.issn.1004-6933.2020.06.006 [摘要(851)] [PDF 2.52 M (515)]

ZHENG Congqi, WU Wei, WEI Jie, et al. Fish diversity and its influencing factors in the Dawen River, a tributary of the lower Yellow River[J]. Water Resources Protection, 2020, 36(6):31-38.

智慧水利

7. 于翔, 解建仓, 姜仁贵, 等. 数字水网可视化表达及其与业务融合应用[J]. 水资源保护, 2020, 36(6):39-45 DOI:10.3880/j.issn.1004-6933.2020.06.007 [摘要(668)] [PDF 12.53 M (516)]

YU Xiang, XIE Jiancang, JIANG Rengui, et al. Digital water networks visualization and its integration application[J]. Water Resources Protection, 2020, 36(6):39-45.

8. 成波, 江波, 李红清. 菜子湖湿地生态数据库管理系统的设计与实现[J]. 水资源保护, 2020, 36(6):46-52 DOI:10.3880/j.issn.1004-6933.2020.06.008 [摘要(665)] [PDF 5.87 M (426)]

CHENG Bo, JIANG Bo, LI Hongqing. Design and realization of Caizi Lake wetland ecological database management system[J]. Water Resources Protection, 2020, 36(6):46-52.

9. 李肖杨, 陈亚宁, 刘璐, 等. 博斯腾湖流域水资源管理决策支持系统设计与实现[J]. 水资源保护, 2020, 36(6):53-59 DOI:10.3880/j.issn.1004-6933.2020.06.009 [摘要(698)] [PDF 12.10 M (494)]

LI Xiaoyang, CHEN Yaning, LIU Lu, et al. Design and implementation of water resources management decision support system in the Bosten Lake Basin[J]. Water Resources Protection, 2020, 36(6):53-59.

水资源

10. 陈岩, 童国平, 王蕾. 淮河流域农业灰水足迹效率的时空分布与驱动模式[J]. 水资源保护, 2020, 36(6):60-66 DOI:10.3880/j.issn.1004-6933.2020.06.010 [摘要(761)] [PDF 3.48 M (450)]

CHEN Yan, TONG Guoping, WANG Lei. Spatial-temporal distribution and driving models of agricultural grey water footprint efficiency in the Huai River Basin[J]. Water Resources

Protection, 2020, 36(6):60-66.

11. 孔波, 付少杰, 黄强. 大型复杂跨流域调水工程电站-水库-泵站群多目标优化调度[J]. 水资源保护, 2020, 36(6):67-72 DOI:10.3880/j.issn.1004-6933.2020.06.011 [摘要(664)] [PDF 934.78 K (420)]
KONG Bo, FU Shaojie, HUANG Qiang. Multi-objective optimal operation of hydropower plant-reservoir-pumping station group in large complex inter-basin water transfer projects[J]. Water Resources Protection, 2020, 36(6):67-72.
12. 陈嘉琪, 陈仕琦, 马芬艳, 等. 基于数字遥感影像的呼伦湖水量平衡分析[J]. 水资源保护, 2020, 36(6):73-79 DOI:10.3880/j.issn.1004-6933.2020.06.012 [摘要(730)] [PDF 2.98 M (595)]
CHEN Jiaqi, CHEN Shiqi, MA Fenyan, et al. Analysis of water balance of Hulun Lake based on digital remote sensing images[J]. Water Resources Protection, 2020, 36(6):73-79.
13. 李晓英, 吴淑君, 王颖, 等. 淮河流域陆地水储量与干旱指标分析[J]. 水资源保护, 2020, 36(6):80-85 DOI:10.3880/j.issn.1004-6933.2020.06.013 [摘要(694)] [PDF 1.63 M (443)]
LI Xiaoying, WU Shujun, WANG Ying, et al. Analysis of terrestrial water storage and drought indices in the Huaihe River Basin[J]. Water Resources Protection, 2020, 36(6):80-85.
14. 尹鑫, 沙海飞, 张海滨, 等. 基于分区分类功能的江苏省河湖空间管控框架[J]. 水资源保护, 2020, 36(6):86-92 DOI:10.3880/j.issn.1004-6933.2020.06.014 [摘要(671)] [PDF 5.36 M (501)]
YIN Xin, SHA Haifei, ZHANG Haibin, et al. Spatial control framework of rivers and lakes in Jiangsu Province based on function of zoning and classification[J]. Water Resources Protection, 2020, 36(6):86-92.
15. 杨少雄, 侯精明, 陈光照, 等. LID 径流控制效果对设计暴雨重现期的响应[J]. 水资源保护, 2020, 36(6):93-98 DOI:10.3880/j.issn.1004-6933.2020.06.015 [摘要(718)] [PDF 2.77 M (452)]
YANG Shaoxiong, HOU Jingming, CHEN Guangzhao, et al. Response law of LID runoff control effect to design rainstorm return period[J]. Water Resources Protection, 2020, 36(6):93-98.
16. 刘寒青, 刘静, 赵建世, 等. 基于水资源系统可持续性的南水北调进京规模分析[J]. 水资源保护, 2020, 36(6):99-105 DOI:10.3880/j.issn.1004-6933.2020.06.016 [摘要(672)] [PDF 1.24 M (466)]
LIU Hanqing, LIU Jing, ZHAO Jianshi, et al. Analysis of water transfer scale of South-to-North Water Diversion Project based on sustainability of water resources system[J]. Water Resources Protection, 2020, 36(6):99-105.

水环境

17. 朱喜, 李贵宝, 王圣瑞. 太湖蓝藻暴发的治理[J]. 水资源保护, 2020, 36(6):106-111 DOI:10.3880/j.issn.1004-6933.2020.06.017 [摘要(708)] [PDF 184.69 K (502)]
ZHU Xi, LI Guibao, WANG Shengrui. Treatment of blue algae outbreak in Taihu Lake[J]. Water Resources Protection, 2020, 36(6):106-111.
18. 李颖, 庾从蓉, 孙钰峰, 等. 降雨强度对植被过滤带中胶体迁移过程的影响[J]. 水资源保护, 2020, 36(6):112-116 DOI:10.3880/j.issn.1004-6933.2020.06.018 [摘要(642)] [PDF 1.81 M (414)]
LI Ying, YU Congrong, SUN Yufeng, et al. Effect of rainfall intensity on colloid migration in vegetation filter strips[J]. Water Resources Protection, 2020, 36(6):112-116.
19. 崔晓倩, 陈国栋, 郑昊, 等. 水环境中莱茵衣藻对纳米氧化铜的吸附及离子溶出的影响[J]. 水资源保护, 2020, 36(6):117-121 DOI:10.3880/j.issn.1004-6933.2020.06.019 [摘要(687)] [PDF 1.03 M (438)]
CUI Xiaolian, CHEN Guodong, ZHENG Hao, et al. Adsorption of Chlamydomonas reinhardtii to CuO-NPs and its effect on ion release in water environment[J]. Water Resources Protection, 2020, 36(6):117-121.

水生态

20. 崔东文, 包艳飞. 基于人工生态系统优化算法的组合生长需水预测模型[J]. 水资源保护, 2020, 36(6):122-130 DOI:10.3880/j.issn.1004-6933.2020.06.020 [摘要(798)] [PDF 1.34 M (436)]
CUI Dongwen, BAO Yanfei. Combined growth water demand forecasting model based on artificial ecosystem optimization algorithm[J]. Water Resources
21. 林若兰, 卓文珊, 高延康, 等. 基于 SWAT 模型的北江流域生态径流调节服务评估[J]. 水资源保护, 2020, 36(6):131-136 DOI:10.3880/j.issn.1004-6933.2020.06.021 [摘要(661)] [PDF 2.53 M (455)]
LIN Ruolan, ZHUO Wenshan, GAO Yankang, et al. Assessment of ecohydrological regulation service in the Beijiang River Basin based on SWAT model[J]. Water Resources Protection, 2020, 36(6):131-136.

2021 第 1 期

水资源

1. 金菊良, 徐新光, 周戎星, 等. 基于联系数和耦合协调度的水资源空间均衡评价方法[J]. 水资源保护, 2021, 37(1):1-6 DOI:10.3880/j.issn.1004-6933.2021.01.001 [摘要(3176)] [PDF 616.16 K (4478)]
JIN Juliang, XU Xinguang, ZHOU Rongxing, et al. Water resources spatial balance evaluation method based on connection number and coupling coordination degree[J]. Water Resources Protection, 2021, 37(1):1-6.

2. 薛联青,倪涛,刘远洪,等.基于地表径流量预测的玛纳斯河流域绿洲适宜规模计算[J].水资源保护,2021,37(1):7-13DOI:10.3880/j.issn.1004-6933.2021.01.002 [[摘要\(2260\)](#)] [[PDF 2.85 M \(2143\)](#)]
XUE Lianqing, NI Tao, LIU Yuanhong, et al. Calculation of suitable scale of oasis in Manas River Basin based on surface runoff prediction[J]. Water Resources Protection, 2021, 37(1):7-13.
3. 张翔,廖辰昶,韦芳良,等.城市水系统关联模型研究[J].水资源保护,2021,37(1):14-19DOI:10.3880/j.issn.1004-6933.2021.01.003. [[摘要\(1556\)](#)] [[PDF 1.25 M \(1382\)](#)]
ZHANG Xiang, LIAO Chenyang, WEI Fangliang, et al. Research on the nexus model of urban water system[J]. Water Resources Protection, 2021, 37(1):14-19.
4. 刘永志,唐雯雯,张文婷,等.基于灾害链的洪涝灾害风险分析综述[J].水资源保护,2021,37(1):20-27DOI:10.3880/j.issn.1004-6933.2021.01.004 [[摘要\(1620\)](#)] [[PDF 1008.58 K \(1484\)](#)]
LIU Yongzhi, TANG Wenwen, ZHANG Wenting, et al. Review of flood disaster risk analysis based on disaster chain[J]. Water Resources Protection, 2021, 37(1):20-27.
5. 张珂,牛杰帆,李曦,等.洪水预报智能模型在中国半干旱半湿润区的应用对比[J].水资源保护,2021,37(1):28-35DOI:10.3880/j.issn.1004-6933.2021.01.005 [[摘要\(1519\)](#)] [[PDF 4.66 M \(1396\)](#)]
ZHANG Ke, NIU Jiefan, LI Xi, et al. Comparison of artificial intelligence flood forecasting models in China's semi-arid and semi-humid regions[J]. Water Resources Protection, 2021, 37(1):28-35.
6. 吴志勇,程丹丹,何海,等.综合干旱指数研究进展[J].水资源保护,2021,37(1):36-45DOI:10.3880/j.issn.1004-6933.2021.01.006 [[摘要\(2157\)](#)] [[PDF 1.00 M \(1719\)](#)]
WU Zhiyong, CHENG Dandan, HE Hai, et al. Research progress of composite drought index[J]. Water Resources Protection, 2021, 37(1):36-45.
7. 袁飞,章益棋,刘懿,等.基于标准化帕尔默干旱指数的西江流域干旱评估[J].水资源保护,2021,37(1):46-52DOI:10.3880/j.issn.1004-6933.2021.01.007 [[摘要\(1472\)](#)] [[PDF 3.19 M \(1184\)](#)]
YUAN Fei, ZHANG Yiqi, LIU Yi, et al. Drought assessment of Xijiang River Basin based on standardized Palmer drought index[J]. Water Resources Protection, 2021, 37(1):46-52.
8. 邹磊,夏军,张印,等.海河流域降水时空演变特征及其驱动力分析[J].水资源保护,2021,37(1):53-60DOI:10.3880/j.issn.1004-6933.2021.01.008 [[摘要\(1010\)](#)] [[PDF 16.87 M \(1120\)](#)]
ZOU Lei, XIA Jun, ZHANG Yin, et al. Spatial-temporal change characteristics and driving forces of precipitation in the Haihe River Basin[J]. Water Resources Protection, 2021, 37(1):53-60.

9. 孙才志, 郝帅, 赵良仕. 中国水资源-能源-粮食纽带系统效率时空分异特征[J]. 水资源保护, 2021, 37(1):61-68DOI:10.3880/j.issn.1004-6933.2021.01.009[摘要(1088)] [PDF 9.84 M (771)]

SUN Caizhi, HAO Shuai, ZHAO Liangshi. Spatial-temporal differentiation characteristics of water resources-energy-food nexus system efficiency in China[J]. Water Resources Protection, 2021, 37(1):61-68.

10. 赵良仕, 刘思佳, 孙才志. 黄河流域水-能源-粮食安全系统的耦合协调发展研究[J]. 水资源保护, 2021, 37(1):69-78DOI:10.3880/j.issn.1004-6933.2021.01.010[摘要(1046)] [PDF 1.60 M (750)]

ZHAO Liangshi, LIU Sijia, SUN Caizhi. Study on coupling and coordinated development of water-energy-food security system in the Yellow River Basin[J]. Water Resources Protection, 2021, 37(1):69-78.

11. 焦士兴, 李青云, 王安周, 等. 基于生态位的安阳市用水结构与产业结构动态演化分析[J]. 水资源保护, 2021, 37(1):79-85DOI:10.3880/j.issn.1004-6933.2021.01.011[摘要(979)] [PDF 934.79 K (736)]

JIAO Shixing, LI Qingyun, WANG Anzhou, et al. Dynamic evolution analysis of water consumption structure and industrial structure based on niche in Anyang City[J]. Water Resources Protection, 2021, 37(1):79-85.

水事观察

12. 唐克旺, 石秋池. 黄河治理要有新思维[J]. 水资源保护, 2021, 37(1):86DOI:10.3880/j.issn.1004-6933.2021.01.012[摘要(856)] [PDF 317.35 K (780)]
TANG Kewan, SHI Qiuchi. New thinking on harnessing the Yellow River[J]. Water Resources Protection, 2021, 37(1):86.

13. 贾绍凤, 柳文华. 水资源开发利用40%阈值溯源与思考[J]. 水资源保护, 2021, 37(1):87-89DOI:10.3880/j.issn.1004-6933.2021.01.013[摘要(1107)] [PDF 421.46 K (785)]

JIA Shaofeng, LIU Wenhua. Tracing and thinking about 40% threshold value of water resources development and utilization ratio[J]. Water Resources Protection, 2021, 37(1):87-89.

水环境

14. 李家科, 彭凯, 郝改瑞, 等. 黄河流域非点源污染负荷定量化与控制研究进展[J]. 水资源保护, 2021, 37(1):90-102DOI:10.3880/j.issn.1004-6933.2021.01.014[摘要(1023)] [PDF 3.74 M (791)]

LI Jiake, PENG Kai, HAO Gairui, et al. Research progress on quantification and control of non-point source pollution load in the Yellow River Basin[J]. Water Resources Protection, 2021, 37(1):90-102.

15. 季永兴, 韩非非, 施震余, 等. 长三角一体化示范区水生态环境治理思考[J]. 水资源保护, 2021, 37(1):103-109DOI:10.3880/j.issn.1004-6933.2021.01.015[摘要(1055)] [PDF 10.50 M (927)]

JI Yongxing, HAN Feifei, SHI Zhenyu, et al. Thinking on water eco-environment management in regional integration demonstration area of Yangtze River Delta[J]. Water Resources Protection, 2021, 37(1):103-109.

16. 韩龙喜, 王晨芳, 蒋安祺. 突发事件泄漏石油类污染物在水环境中迁移转化研究进展[J]. 水资源保护, 2021, 37(1):110-117DOI:10.3880/j.issn.1004-6933.2021.01.016 [摘要(1012)] [PDF 984.90 K (716)]

HAN Longxi, WANG Chenfang, JIANG Anqi. Research progress of migration and transformation of oil pollutants from emergency spills in water[J]. Water Resources Protection, 2021, 37(1):110-117.

17. 杜晓丽, 梁卉, 闫鑫瑞, 等. 城市地表径流胶体对重金属下渗迁移行为的影响[J]. 水资源保护, 2021, 37(1):118-123DOI:10.3880/j.issn.1004-6933.2021.01.017 [摘要(941)] [PDF 2.07 M (672)]

DU Xiaoli, LIANG Hui, YAN Xinrui, et al. Effects of urban surface runoff colloid on infiltration and migration behavior of heavy metals[J]. Water Resources Protection, 2021, 37(1):118-123.

18. 李俊奇, 周金成, 杨正, 等. 合流制溢流控制指标与标准制定研究[J]. 水资源保护, 2021, 37(1):124-131DOI:10.3880/j.issn.1004-6933.2021.01.018 [摘要(840)] [PDF 1.01 M (624)]

LI Junqi, ZHOU Jincheng, YANG Zheng, et al. Study on control indicators and standard formulation of combined sewer overflow[J]. Water Resources Protection, 2021, 37(1):124-131.

水生态

19. 张列宇, 祝秋恒, 李晓光, 等. 磁化诱导技术在水生态修复中的应用与研究展望[J]. 水资源保护, 2021, 37(1):132-139DOI:10.3880/j.issn.1004-6933.2021.01.019[摘要(893)] [PDF 1009.29 K (631)]

ZHANG Lieyu, ZHU Qiuhe, LI Xiaoguang, et al. Application and prospect of magnetization induction technology in water ecological restoration[J]. Water Resources Protection, 2021, 37(1):132-139.

20. 华祖林, 董越洋, 褚克坚. 高度人工化城市河流生态水位和生态流量计算方法[J]. 水资源保护, 2021, 37(1):140-144DOI:10.3880/j.issn.1004-6933.2021.01.020 [摘要(982)] [PDF 1.27 M (724)]

HUA Zulin, DONG Yueyang, CHU Kejian. Calculation method of ecological water level and discharge in highly artificial urban river[J]. Water Resources Protection, 2021, 37(1):140-144.

2021 第 2 期

特约专家论坛

1. 王浩, 王建华, 胡鹏. 水资源保护的新内涵: “量-质-域-流-生” 协同保护和修复[J]. 水资源保护, 2021, 37(2):1-9DOI:10.3880/j.issn.1004-6933.2021.02.001[摘要(1282)] [PDF 6.75 M (940)]

WANG Hao, WANG Jianhua, HU Peng. New connotation of water resources protection: “quantity-quality-domain-connectivity-biology” coordinated protection and restoration[J]. Water Resources Protection, 2021, 37(2):1-9.

2. 徐宗学, 任梅芳, 陈浩. 我国沿海城市洪潮组合风险分析[J]. 水资源保护, 2021, 37(2):10-14 DOI:10.3880/j.issn.1004-6933.2021.02.002 [[摘要\(815\)](#)] [[PDF 2.01 M \(559\)](#)]
XU Zongxue, REN Meifang, CHEN Hao. Analysis on urban flooding risk caused by flood tide combination in coastal cities[J]. Water Resources Protection, 2021, 37(2):10-14.

3. 侯俊, 王岩博, 张明, 等. 微生物-物化耦合法降解毒死蜱研究进展[J]. 水资源保护, 2021, 37(2):15-20 DOI:10.3880/j.issn.1004-6933.2021.02.003 [[摘要\(783\)](#)] [[PDF 1.86 M \(473\)](#)]

HOU Jun, WANG Yanbo, ZHANG Ming, et al. Research progress on degradation of chlorpyrifos by microbial-physicochemical coupling method[J]. Water Resources Protection, 2021, 37(2):15-20.

新疆水资源研究

4. 左其亭, 李佳伟, 马军霞, 等. 新疆水资源时空变化特征及适应性利用战略研究[J]. 水资源保护, 2021, 37(2):21-27 DOI:10.3880/j.issn.1004-6933.2021.02.004 [[摘要\(691\)](#)] [[PDF 5.10 M \(482\)](#)]
ZUO Qiting, LI Jiawei, MA Junxia, et al. Study on spatio-temporal variation characteristics and adaptive utilization strategy of water resources in Xinjiang[J]. Water Resources Protection, 2021, 37(2):21-27.

5. 李倩文, 左其亭, 李东林, 等. 新疆水资源开发利用的空间均衡分析[J]. 水资源保护, 2021, 37(2):28-33 DOI:10.3880/j.issn.1004-6933.2021.02.005 [[摘要\(701\)](#)] [[PDF 690.99 K \(413\)](#)]

LI Qianwen, ZUO Qiting, LI Donglin, et al. Spatial equilibrium analysis of water resources development and utilization in Xinjiang[J]. Water Resources Protection, 2021, 37(2):28-33.

6. 郭佳航, 左其亭, 李东林, 等. 新疆水资源利用与产业发展关联研究[J]. 水资源保护, 2021, 37(2):34-42 DOI:10.3880/j.issn.1004-6933.2021.02.006 [[摘要\(609\)](#)] [[PDF 17.79 M \(565\)](#)]

GUO Jiahang, ZUO Qiting, LI Donglin, et al. Research on relationship between water resources utilization and industrial development in Xinjiang[J]. Water Resources Protection, 2021, 37(2):34-42.

7. 宋玉鑫, 马军霞, 左其亭, 等. 新疆多时间尺度干湿变化特征分析[J]. 水资源保护, 2021, 37(2):43-48 DOI:10.3880/j.issn.1004-6933.2021.02.007 [[摘要\(642\)](#)] [[PDF 8.40 M \(398\)](#)]
SONG Yuxin, MA Junxia, ZUO Qiting, et al. Analysis on characteristics of dry-wet variation on multi-time scale in Xinjiang[J]. Water Resources Protection, 2021, 37(2):43-48.

8. 凌敏华, 陈万贺. 地下水资源对新疆经济社会支撑作用的定量评价[J]. 水资源保护, 2021, 37(2):49-54 DOI:10.3880/j.issn.1004-6933.2021.02.008 [[摘要\(678\)](#)] [[PDF 1.03 M \(387\)](#)]
LING Minhua, CHEN Wanhe. Quantitative evaluation of groundwater resources supporting economy and society in Xinjiang[J]. Water Resources Protection, 2021, 37(2):49-54.

9. 吴青松, 马军霞, 左其亭, 等. 塔里木河流域水资源-经济社会-生态环境耦合系统和谐程度量化分析[J]. 水资源保护, 2021, 37(2):55-62DOI:10.3880/j.issn.1004-6933.2021.02.009[摘要(602)] [PDF 1.11 M (374)]

WU Qingsong, MA Junxia, ZUO Qiting, et al. Quantitative analysis on harmony degree of water resources-economic society-ecological environment coupling system in the Tarim River Basin[J]. Water Resources Protection, 2021, 37(2):55-62.

10. 李星, 左其亭, 韩淑颖, 等. 塔里木河流域水资源适应性利用能力评价及调控[J]. 水资源保护, 2021, 37(2):63-68DOI:10.3880/j.issn.1004-6933.2021.02.010[摘要(616)] [PDF 856.54 K (349)]

LI Xing, ZUO Qiting, HAN Shuying, et al. Evaluation of adaptive utilization capacity of water resources in Tarim River and its regulation[J]. Water Resources Protection, 2021, 37(2):63-68.

11. 王珊珊, 王金林, 周可法, 等. 塔里木河下游土地利用/覆被变化对生态输水的响应[J]. 水资源保护, 2021, 37(2):69-74DOI:10.3880/j.issn.1004-6933.2021.02.011[摘要(611)] [PDF 5.52 M (391)]

WANG Shanshan, WANG Jinlin, ZHOU Kefa, et al. Response of land-use/land cover change to ecological water conveyance in the lower reach of Tarim River[J]. Water Resources Protection, 2021, 37(2):69-74.

12. 李东林, 左其亭, 张伟, 等. 基于 Nerlove 方法的塔里木河流域农业水资源配置模型[J]. 水资源保护, 2021, 37(2):75-80DOI:10.3880/j.issn.1004-6933.2021.02.012[摘要(714)] [PDF 691.87 K (340)]

LI Donglin, ZUO Qiting, ZHANG Wei, et al. Agricultural water resources allocation model in Tarim River Basin based on Nerlove approach[J]. Water Resources Protection, 2021, 37(2):75-80.

水资源

13. 栾震宇, 金秋, 赵思远, 等. 基于 MIKE FLOOD 耦合模型的城市内涝模拟[J]. 水资源保护, 2021, 37(2):81-88DOI:10.3880/j.issn.1004-6933.2021.02.013[摘要(742)] [PDF 18.28 M (541)]

LUAN Zhenyu, JIN Qiu, ZHAO Siyuan, et al. Simulation of urban waterlogging based on MIKE FLOOD coupling model[J]. Water Resources Protection, 2021, 37(2):81-88.

14. 刘曾美, 王尚伟, 蔡玉婷, 等. 感潮地区涝区暴雨与承泄区上游洪水的遭遇规律[J]. 水资源保护, 2021, 37(2):89-94DOI:10.3880/j.issn.1004-6933.2021.02.014[摘要(647)] [PDF 1.21 M (333)]

LIU Zengmei, WANG Shangwei, CAI Yuting, et al. Coincidence rules of rainfall in waterlogging area of tide-affected area and upstream flood in flood area of drainage receiver[J]. Water Resources Protection, 2021, 37(2):89-94.

15. 高玉琴, 刘钺, 赵晨程, 等. 南方季节性缺水河流逐月保证率设定法的改进[J]. 水资源保护, 2021, 37(2):95-101DOI:10.3880/j.issn.1004-6933.2021.02.015[摘要(584)] [PDF 2.12 M (319)]

GAO Yuqin, LIU Yue, ZHAO Chencheng, et al. Improvement on monthly guarantee rate setting method for seasonal water shortage rivers in South China[J]. Water Resources Protection, 2021, 37(2):95-101.

16. 白鹏, 龙秋波. 3种用水量预测方法在京津冀地区的适用性比较[J]. 水资源保护, 2021, 37(2):102-107 DOI:10.3880/j.issn.1004-6933.2021.02.016 [摘要(732)] [PDF 805.54 K (315)]

BAI Peng, LONG Qiubo. Applicability comparison of three water consumption prediction methods in Beijing-Tianjin-Hebei region[J]. Water Resources Protection, 2021, 37(2):102-107.

17. 严方家, 李琼芳, 王燕, 等. 镇江市中历时设计暴雨计算[J]. 水资源保护, 2021, 37(2):108-111 DOI:10.3880/j.issn.1004-6933.2021.02.017 [摘要(560)] [PDF 1.08 M (350)]

YAN Fangjia, LI Qiongfang, WANG Yan, et al. Medium and long duration design rainstorm calculation in Zhenjiang City[J]. Water Resources Protection, 2021, 37(2):108-111.

18. 卫林勇, 江善虎, 任立良, 等. CRU 产品在中国大陆的干旱事件时间性效用评估[J]. 水资源保护, 2021, 37(2):112-120 DOI:10.3880/j.issn.1004-6933.2021.02.018 [摘要(617)] [PDF 14.03 M (401)]

WEI Linyong, JIANG Shanhu, REN Liliang, et al. Utility assessment of CRU products for temporality of drought events in mainland China[J]. Water Resources Protection, 2021, 37(2):112-120.

水环境

19. 舒叶华, 高晨晨. 太湖风生流及污染物输移扩散数值模拟[J]. 水资源保护, 2021, 37(2):121-127 DOI:10.3880/j.issn.1004-6933.2021.02.019 [摘要(656)] [PDF 9.74 M (320)]

SHU Yehua, GAO Chenchen. Numerical simulation of wind-driven current and pollutant transport and diffusion in Taihu Lake[J]. Water Resources Protection, 2021, 37(2):121-127.

20. 张影, 杨晓东, 贾子璇, 等. 基于改进重叠投影法的空间耦合水污染评估模型[J]. 水资源保护, 2021, 37(2):128-134 DOI:10.3880/j.issn.1004-6933.2021.02.020 [摘要(645)] [PDF 5.78 M (324)]

ZHANG Ying, YANG Xiaodong, JIA Zixuan, et al. Space coupling water pollution evaluation model based on improved overlapping projection method[J]. Water Resources Protection, 2021, 37(2):128-134.

21. 胡祉冰, 逢勇, 胥瑞晨, 等. 走马塘排水对望虞河引水水质的影响[J]. 水资源保护, 2021, 37(2):135-140 DOI:10.3880/j.issn.1004-6933.2021.02.021 [摘要(626)] [PDF 6.01 M (352)]

HU Zhibing, PANG Yong, XU Ruichen, et al. Effect of Zoumatang drainage on water quality of Wangyu River diversion[J]. Water Resources Protection, 2021, 37(2):135-140.

22. 戴天杰, 魏攀龙, 潘杨, 等. 苏州市景观水体表观污染类型识别及特征指标筛选[J]. 水资源保护, 2021, 37(2):141-147 DOI:10.3880/j.issn.1004-6933.2021.02.022 [[摘要\(621\)](#)] [[PDF 1.83 M \(329\)](#)]

DAI Tianjie, WEI Panlong, PAN Yang, et al. Identification of apparent pollution types and screening of characteristic indexes of landscape water body in Suzhou City[J]. Water Resources Protection, 2021, 37(2):141-147.

23. 范金辉, 周卫东, 杨协栋, 等. Fe²⁺和 PMS 同步混凝氧化预处理对超滤净化排泥水的影响[J]. 水资源保护, 2021, 37(2):148-152 DOI:10.3880/j.issn.1004-6933.2021.02.023 [[摘要\(723\)](#)] [[PDF 1.82 M \(382\)](#)]

FAN Jinhui, ZHOU Weidong, YANG Xiedong, et al. Effect of Fe²⁺ and PMS synchronous coagulation and oxidation pretreatment on purification of sludge water by ultrafiltration[J]. Water Resources Protection, 2021, 37(2):148-152.

2021 年第 3 期

特约专家论坛

1. 金菊良, 刘东平, 周戎星, 等. 基于投影寻踪权重优化的水资源承载力评价模型[J]. 水资源保护, 2021, 37(3):1-6 DOI:10.3880/j.issn.1004-6933.2021.03.001 [[摘要\(1026\)](#)] [[PDF 754.02 K \(1026\)](#)]

JIN Juliang, LIU Dongping, ZHOU Rongxing, et al. Evaluation model of water resources carrying capacity based on projection pursuit weight optimization[J]. Water Resources Protection, 2021, 37(3):1-6.

2. 刘凌, 朱良珍, 叶键, 等. 张福河浮游植物群落结构及生态位特征[J]. 水资源保护, 2021, 37(3):7-12 DOI:10.3880/j.issn.1004-6933.2021.03.002 [[摘要\(727\)](#)] [[PDF 1.80 M \(616\)](#)]

LIU Ling, ZHU Liangzhen, YE Jian, et al. Community structure and niche characteristics of phytoplankton in Zhangfu River[J]. Water Resources Protection, 2021, 37(3):7-12.

水资源

3. 高玉琴, 陈佳慧, 王冬冬, 等. 海绵城市低影响开发措施综合效益评价体系及应用[J]. 水资源保护, 2021, 37(3):13-19 DOI:10.3880/j.issn.1004-6933.2021.03.003 [[摘要\(700\)](#)] [[PDF 882.01 K \(533\)](#)]

GAO Yuqin, CHEN Jiahui, WANG Dongdong, et al. Comprehensive benefits evaluation system and application of low impact development measures in sponge city[J]. Water Resources Protection, 2021, 37(3):13-19.

4. 李少朋, 赵衡, 王富强, 等. 基于 AHP-TOPSIS 模型的江苏省水资源承载力评价[J]. 水资源保护, 2021, 37(3):20-25 DOI:10.3880/j.issn.1004-6933.2021.03.004 [[摘要\(657\)](#)] [[PDF 2.17 M \(490\)](#)]

LI Shaopeng, ZHAO Heng, WANG Fuqiang, et al. Evaluation of water resources carrying capacity of Jiangsu Province based on AHP-TOPSIS model[J]. Water Resources Protection, 2021, 37(3):20-25.

5. 周昕, 高玉琴, 吴迪. 不同 LID 设施组合对区域雨洪控制效果的影响模拟[J]. 水资源保护, 2021, 37(3):26-31 DOI:10.3880/j.issn.1004-6933.2021.03.005 [摘要(667)] [PDF 9.04 M (537)]
ZHOU Xin, GAO Yuqin, WU Di. Simulation on influence of regional rain-flood control effect under different combinations of LID measures[J]. Water Resources Protection, 2021, 37(3):26-31.
6. 温馨, 周纪, 刘绍民, 等. 基于多源产品的西南河流源区地表蒸散发时空特征[J]. 水资源保护, 2021, 37(3):32-42 DOI:10.3880/j.issn.1004-6933.2021.03.006 [摘要(650)] [PDF 7.79 M (530)]
WEN Xin, ZHOU Ji, LIU Shaomin, et al. Spatio-temporal characteristics of surface evapotranspiration in source region of rivers in Southwest China based on multi-source products[J]. Water Resources Protection, 2021, 37(3):32-42.
7. 皋云, 李琼芳, 周正模, 等. 镇江市降雨场次划分与暴雨特性分析[J]. 水资源保护, 2021, 37(3):43-49 DOI:10.3880/j.issn.1004-6933.2021.03.007 [摘要(681)] [PDF 3.00 M (513)]
GAO Yun, LI Qiongfang, ZHOU Zhengmo, et al. Division of rainfall events and analysis of rainstorm characteristics in Zhenjiang City[J]. Water Resources Protection, 2021, 37(3):43-49.
8. 范亚洲, 张珂, 刘林鑫, 等. 水库水体的最大类间方差迭代遥感提取方法[J]. 水资源保护, 2021, 37(3):50-55 DOI:10.3880/j.issn.1004-6933.2021.03.008 [摘要(706)] [PDF 6.78 M (509)]
FAN Yazhou, ZHANG Ke, LIU Linxin, et al. Optimal extraction of reservoir water body from remote sensing images based on iterative inter-class variance maximization method[J]. Water Resources Protection, 2021, 37(3):50-55.
9. 余亚飞, 温忠辉, 商金华, 等. 基于泉群流量与降水量相关性的明水泉域岩溶水强径流带识别[J]. 水资源保护, 2021, 37(3):56-60 DOI:10.3880/j.issn.1004-6933.2021.03.009 [摘要(680)] [PDF 3.26 M (461)]
YU Yafei, WEN Zhonghui, SHANG Jinhua, et al. Identification of karst water strong runoff zone in Mingshui spring area based on correlation between spring discharge and precipitation[J]. Water Resources Protection, 2021, 37(3):56-60.
10. 张文浩, 瞿思敏, 徐瑶, 等. 泼水水库对黄河径流过程及水文情势的影响[J]. 水资源保护, 2021, 37(3):61-65 DOI:10.3880/j.issn.1004-6933.2021.03.010 [摘要(623)] [PDF 1.71 M (448)]
ZHANG Wenhao, QU Simin, XU Yao, et al. Influence of Pohe Reservoir on runoff process and hydrological regime of Huanghe River[J]. Water Resources Protection, 2021, 37(3):61-65.

11. 林鹏, 陈启慧, 李琼芳, 等. 环太湖各水资源分区入出湖水量及贡献分析[J]. 水资源保护, 2021, 37(3):66-73DOI:10.3880/j.issn.1004-6933.2021.03.011[摘要(707)][PDF 4.33 M (472)]
LIN Peng, CHEN Qihui, LI Qiongfang, et al. Analysis on inflow and outflow of water resources zones around Taihu Lake and its contribution[J]. Water Resources Protection, 2021, 37(3):66-73.

12. 李超, 黄薇, 向小华, 等. 产流模型蓄水容量的一种尺度校正方法[J]. 水资源保护, 2021, 37(3):74-79DOI:10.3880/j.issn.1004-6933.2021.03.012[摘要(651)][PDF 9.27 M (499)]
LI Chao, HUANG Wei, XIANG Xiaohua, et al. A scale correction method for water storage capacity of runoff generation model[J]. Water Resources Protection, 2021, 37(3):74-79.

13. 李文静, 许文强, 包安明, 等. 阿姆河流域耕地变化及水土匹配特征分析[J]. 水资源保护, 2021, 37(3):80-86DOI:10.3880/j.issn.1004-6933.2021.03.013[摘要(626)][PDF 5.25 M (480)]
LI Wenjing, XU Wenqiang, BAO Anming, et al. Analysis of cultivated land change and water-land matching characteristics in Amu Darya River Basin[J]. Water Resources Protection, 2021, 37(3):80-86.

水环境

14. 何振芳, 郭庆春, 邓焕广, 等. 南水北调蓄湖泊水质参数遥感反演及其影响因素[J]. 水资源保护, 2021, 37(3):87-95DOI:10.3880/j.issn.1004-6933.2021.03.014[摘要(640)][PDF 12.09 M (613)]
HE Zhenfang, GUO Qingchun, DENG Huanguang, et al. Remote sensing inversion of water quality parameters and its influencing factors in a storage lake of South-to-North Water Diversion Project[J]. Water Resources Protection, 2021, 37(3):87-95.

15. 赵云云, 李骐安, 陈正侠, 等. 基于多目标评价的市政道路径流污染控制生物滞留设施填料优化[J]. 水资源保护, 2021, 37(3):96-101DOI:10.3880/j.issn.1004-6933.2021.03.015[摘要(597)][PDF 2.06 M (447)]
ZHAO Yunyun, LI Qian, CHEN Zhengxia, et al. Optimization of bioretention facility media for municipal road runoff pollution control based on multi-objective evaluation[J]. Water Resources Protection, 2021, 37(3):96-101.

16. 胡良宇, 戎贵文, 汪星, 等. 初期弃流后板房屋面雨水污染物质量浓度衰减规律[J]. 水资源保护, 2021, 37(3):102-107DOI:10.3880/j.issn.1004-6933.2021.03.016[摘要(558)][PDF 1.84 M (416)]
HU Liangyu, RONG Guiwen, WANG Xing, et al. Attenuation rule of rainwater pollutant concentration on slab roof after split-flow of first flush runoff[J]. Water Resources Protection, 2021, 37(3):102-107.

17. 汪静娴, 孟玉生, 逢勇, 等. 阳澄西湖围堰施工中悬浮物输移扩散数值模拟[J]. 水资源保

护, 2021, 37(3):108-114 DOI:10.3880/j.issn.1004-6933.2021.03.017 [摘要(574)] [PDF 10.73 M (524)]
WANG Jingxian, MENG Yusheng, PANG Yong, et al. Numerical simulation of suspended solids transport and diffusion in cofferdam construction of the West of Yangcheng Lake [J]. Water Resources Protection, 2021, 37(3):108-114.

18. 潘翔, 饶磊, 王沛芳, 等. 生物负载微孔渗水型混凝土对土壤中残留毒死蜱的去除试验 [J]. 水资源保护, 2021, 37(3):115-120 DOI:10.3880/j.issn.1004-6933.2021.03.018 [摘要(646)] [PDF 1.39 M (433)]
PAN Xiang, RAO Lei, WANG Peifang, et al. Removal experiment of residual chlorpyrifos in soil by bio-loaded microporous permeable concrete [J]. Water Resources Protection, 2021, 37(3):115-120.

19. 杨超慧, 王超, 欧阳萍, 等. 丙二酸对铜绿微囊藻的抑制效果 [J]. 水资源保护, 2021, 37(3):121-126 DOI:10.3880/j.issn.1004-6933.2021.03.019 [摘要(581)] [PDF 4.50 M (445)]
YANG Chaohui, WANG Chao, OUYANG Ping, et al. Inhibitory effect of malonic acid on *Microcystis aeruginosa* [J]. Water Resources Protection, 2021, 37(3):121-126.

20. 谭清乾, 王沛芳, 王洵, 等. 不同光照下梅尼小环藻对昼夜温差变化的生理响应 [J]. 水资源保护, 2021, 37(3):127-135 DOI:10.3880/j.issn.1004-6933.2021.03.020 [摘要(610)] [PDF 2.06 M (432)]
TAN Qingqian, WANG Peifang, WANG Xun, et al. Physiological response of *Cyclotella meneghiniana* to diurnal temperature difference under different light conditions [J]. Water Resources Protection, 2021, 37(3):127-135.

水生态

21. 吴宸晖, 鞠茂森. 河流生态修复的国际经验及对长江大保护的启示 [J]. 水资源保护, 2021, 37(3):136-144 DOI:10.3880/j.issn.1004-6933.2021.03.021 [摘要(624)] [PDF 1.23 M (462)]
WU Chenhui, JU Maosen. International experience of river ecological restoration and its enlightenment to the Yangtze River Protection [J]. Water Resources Protection, 2021, 37(3):136-144.

22. 杜现增, 袁榆梁, 孟钰, 等. 基于复合模糊物元-熵权组合模型的淮河干流健康综合评价 [J]. 水资源保护, 2021, 37(3):145-151 DOI:10.3880/j.issn.1004-6933.2021.03.022 [摘要(539)] [PDF 1.03 M (454)]
DU Xianzeng, YUAN Yuliang, MENG Yu, et al. Comprehensive health evaluation of Huaihe River mainstream based on compound fuzzy matter element-entropy weight combination model [J]. Water Resources Protection, 2021, 37(3):145-151.

23. 应征涛, 詹沪成, 唐洪根, 等. 螃蟹扰动作用对滨海湿地水盐交换的影响 [J]. 水资源保

护, 2021, 37(3):152-157DOI:10.3880/j.issn.1004-6933.2021.03.023[摘要(636)][PDF 4.49 M (461)]

YING Zhengtao, ZHAN Lucheng, TANG Honggen, et al. Effects of crab disturbance on water and salt exchange in coastal wetlands[J]. Water Resources Protection, 2021, 37(3):152-157.

2021 年第 4 期

特约专家论坛

1. 金菊良, 汤睿, 周戎星, 等. 基于联系数的城市水生态文明建设评价方法[J]. 水资源保

护, 2021, 37(4):1-6DOI:10.3880/j.issn.1004-6933.2021.04.001[摘要(726)][PDF 703.38 K (612)]

JIN Juliang, TANG Rui, ZHOU Rongxing, et al. Evaluation method for urban water eco-civilization construction based on connection number[J]. Water Resources Protection, 2021, 37(4):1-6.

2. 贾先文, 李周. 流域治理研究进展与我国流域治理体系框架构建[J]. 水资源保

护, 2021, 37(4):7-14DOI:10.3880/j.issn.1004-6933.2021.04.002[摘要(622)][PDF 3.36 M (519)]

JIA Xianwen, LI Zhou. Research progress of watershed governance and construction of Chinese watershed governance system framework[J]. Water Resources Protection, 2021, 37(4):7-14.

3. 粟晓玲, 姜田亮, 牛纪苹. 生态干旱的概念及研究进展[J]. 水资源保

护, 2021, 37(4):15-21DOI:10.3880/j.issn.1004-6933.2021.04.003[摘要(661)][PDF 960.64 K (370)]

SU Xiaoling, JIANG Tianliang, NIU Jiping. Concept and research progress of ecological drought[J]. Water Resources Protection, 2021, 37(4):15-21.

4. 陈莎, 吕鹤, 李素梅, 等. 面向水资源可持续利用的综合水足迹评价方法[J]. 水资源保

护, 2021, 37(4):22-28DOI:10.3880/j.issn.1004-6933.2021.04.004[摘要(576)][PDF 972.39 K (366)]

CHEN Sha, LYU He, LI Sumei, et al. Methods of comprehensive water footprint assessment for sustainable utilization of water resources[J]. Water Resources Protection, 2021, 37(4):22-28.

5. 黄国如, 赵晓莺, 麦叶鹏. 低影响开发措施对雨水径流的控制效应[J]. 水资源保

护, 2021, 37(4):29-36DOI:10.3880/j.issn.1004-6933.2021.04.005[摘要(583)][PDF 2.71 M (406)]

HUANG Guoru, ZHAO Xiaoying, MAI Yepeng. Control effect of low impact development measures on rainwater runoff[J]. Water Resources Protection, 2021, 37(4):29-36.

黄河流域高质量发展

6. 张永凯, 孙雪梅. 黄河流域水资源利用效率测度与评价[J]. 水资源保

护, 2021, 37(4):37-43DOI:10.3880/j.issn.1004-6933.2021.04.006[摘要(533)][PDF 1.72 M (364)]
ZHANG Yongkai, SUN Xuemei. Measurement and evaluation of water resources utilization efficiency in the Yellow River Basin[J]. Water Resources Protection, 2021, 37(4):37-43.

7. 徐发凯, 何丽, 王一帆, 等. 2010—2019年黄河干流兰州和白银段水质时空变化特征[J]. 水资源保护, 2021, 37(4):44-50DOI:10.3880/j.issn.1004-6933.2021.04.007[摘要(550)][PDF 1.43 M (404)]
XU Fakai, HE Li, WANG Yifan, et al. Temporal and spatial variation characteristics of water quality in Lanzhou and Baiyin section of the Yellow River mainstream from 2010 to 2019[J]. Water Resources Protection, 2021, 37(4):44-50.

8. 孙晓杰, 舒航, 刘云江, 等. 环境因子对黄河甘宁蒙段表层沉积物中磷吸附-解吸的影响[J]. 水资源保护, 2021, 37(4):51-60DOI:10.3880/j.issn.1004-6933.2021.04.008[摘要(491)][PDF 4.41 M (397)]
SUN Xiaojie, SHU Hang, LIU Yunjiang, et al. Effects of environmental factors on phosphorus adsorption and desorption in surface sediments of Gansu-Ningxia-Inner Mongolia section of the Yellow River[J]. Water Resources Protection, 2021, 37(4):51-60.

水资源

9. 王辉, 吴文俊, 王广, 等. 昆明市极端降水事件演变特征及城市效应[J]. 水资源保护, 2021, 37(4):61-68DOI:10.3880/j.issn.1004-6933.2021.04.009[摘要(568)][PDF 9.16 M (458)]
WANG Hui, WU Wenjun, WANG Guang, et al. Evolution characteristics of extreme precipitation events and its urban effect in Kunming City[J]. Water Resources Protection, 2021, 37(4):61-68.

10. 王子悦, 徐慧, 黄丹姿, 等. 基于熵权物元模型的长三角幸福河层次评价[J]. 水资源保护, 2021, 37(4):69-74DOI:10.3880/j.issn.1004-6933.2021.04.010[摘要(515)][PDF 662.40 K (340)]
WANG Ziyue, XU Hui, HUANG Danzi, et al. Hierarchy evaluation of Happy River in the Yangtze River Delta based on entropy weight and matter element model[J]. Water Resources Protection, 2021, 37(4):69-74.

11. 陈刚, 王文凤, 马芬艳, 等. 大兴安岭外源水补给的水量平衡与同位素证据[J]. 水资源保护, 2021, 37(4):75-81DOI:10.3880/j.issn.1004-6933.2021.04.011[摘要(468)][PDF 3.12 M (396)]
CHEN Gang, WANG Wenfeng, MA Fenyan, et al. Water balance and isotopic evidence of external water supply in Daxingan Mountains[J]. Water Resources Protection, 2021, 37(4):75-81.

12. 冷梦辉, 白桦, 李二辉, 等. 洪水基流分割非参数检验方法优选[J]. 水资源保护, 2021, 37(4):82-88DOI:10.3880/j.issn.1004-6933.2021.04.012[摘要(512)][PDF 1.61 M (372)]

LENG Menghui, BAI Hua, LI Erhui, et al. Optimization of nonparametric test methods for flood baseflow separation[J]. Water Resources Protection, 2021, 37(4):82-88.

13. 王哲晓, 徐源, 王晨曲, 等. 海绵城市建设的技术装备应用综述[J]. 水资源保护, 2021, 37(4):89-96 DOI:10.3880/j.issn.1004-6933.2021.04.013 [摘要(464)] [PDF 1.26 M (373)]
WANG Zhexiao, XU Yuan, WANG Chenqu, et al. A summary of application of technology and equipment in sponge city construction[J]. Water Resources Protection, 2021, 37(4):89-96.

水环境

14. 王一舒, 吴仁人, 荣楠, 等. 西江下游流域水质与不同空间尺度土地利用的响应关系[J]. 水资源保护, 2021, 37(4):97-104 DOI:10.3880/j.issn.1004-6933.2021.04.014 [摘要(500)] [PDF 9.98 M (408)]
WANG Yishu, WU Renren, RONG Nan, et al. Response relationship between water quality in the lower reaches of Xijiang River Basin and land use at different spatial scales[J]. Water Resources Protection, 2021, 37(4):97-104.

15. 孙瑞瑞, 吕文, 顾林森, 等. 阳澄西湖入湖河道水质时空变化特征[J]. 水资源保护, 2021, 37(4):105-108 DOI:10.3880/j.issn.1004-6933.2021.04.015 [摘要(484)] [PDF 2.07 M (373)]
SUN Ruirui, LYU Wen, GU Linsen, et al. Spatial and temporal variation characteristics of water quality in rivers flowing into West Yangcheng Lake[J]. Water Resources Protection, 2021, 37(4):105-108.

16. 苏程佳, 陈晓宏, 谭永强, 等. 潭江水质时空变化特征及其驱动因子[J]. 水资源保护, 2021, 37(4):109-116 DOI:10.3880/j.issn.1004-6933.2021.04.016 [摘要(516)] [PDF 2.91 M (400)]
SU Chengjia, CHEN Xiaohong, TAN Yongqiang, et al. Spatial and temporal variation characteristics of water quality in Tanjiang River and its driving factors[J]. Water Resources Protection, 2021, 37(4):109-116.

17. 赵诣. 有机磷灭蚊剂投放浓度和时间对水体总磷的影响[J]. 水资源保护, 2021, 37(4):117-120 DOI:10.3880/j.issn.1004-6933.2021.04.017 [摘要(469)] [PDF 802.72 K (379)]
ZHAO Yi. Effect on adding concentration and time of organophosphorus insecticide on TP in water[J]. Water Resources Protection, 2021, 37(4):117-120.

18. 钱睿智, 陈静, 王永东. 基于氮同位素的通扬运河污染负荷解析[J]. 水资源保护, 2021, 37(4):121-126 DOI:10.3880/j.issn.1004-6933.2021.04.018 [摘要(470)] [PDF 7.86 M (411)]
QIAN Ruizhi, CHEN Jing, ANG Yongdong. Analysis of pollution load of Tongyang Canal based on nitrogen

isotope[J]. Water Resources Protection, 2021, 37(4):121-126.

19. 薛鹏腾, 毛立波, 张峰, 等. 基于质量冲刷曲线和多属性决策的分流制控污调蓄设施的优化设计[J]. 水资源保护, 2021, 37(4):127-132 DOI:10.3880/j.issn.1004-6933.2021.04.019 [摘要(450)] [PDF 1022.33 K (357)]
XUE Pengteng, MAO Libo, ZHANG Feng, et al. Optimal design of regulation and storage facilities for pollution control in separate system based on mass flush curve and multi-attribute decision making[J]. Water Resources Protection, 2021, 37(4):127-132.

20. 逢敏, 宋为威, 钱程. 引调水改善玄武湖水质的水量优化方法[J]. 水资源保护, 2021, 37(4):133-139 DOI:10.3880/j.issn.1004-6933.2021.04.020 [摘要(484)] [PDF 3.50 M (387)]
PANG Min, SONG Weiwei, QIAN Cheng. Water quantity optimization method for improving water quality of Xuanwu Lake by water diversion[J]. Water Resources Protection, 2021, 37(4):133-139.

21. 王思如, 杨大文, 孙金华, 等. 我国农业面源污染现状与特征分析[J]. 水资源保护, 2021, 37(4):140-147 DOI:10.3880/j.issn.1004-6933.2021.04.021 [摘要(491)] [PDF 879.20 K (365)]
WANG Siru, YANG Dawen, SUN Jinhua, et al. Analysis on status and characteristics of agricultural non point source pollution in China[J]. Water Resources Protection, 2021, 37(4):140-147.

22. 李晨璐, 郭雅妮, 郑利兵, 等. 石英砂加载混凝工艺的 DOM 去除特征与混凝机理[J]. 水资源保护, 2021, 37(4):148-155 DOI:10.3880/j.issn.1004-6933.2021.04.022 [摘要(482)] [PDF 6.91 M (365)]
LI Chenlu, GUO Yani, ZHENG Libing, et al. DOM removal characteristics and coagulation mechanism of silica sand loading coagulation process[J]. Water Resources Protection, 2021, 37(4):148-155.

水生态

23. 李港, 陈诚, 何欣霞, 等. 湖泊藻类动态模型数据同化模式的改进[J]. 水资源保护, 2021, 37(4):156-165 DOI:10.3880/j.issn.1004-6933.2021.04.023 [摘要(471)] [PDF 5.64 M (372)]
LI Gang, CHEN Cheng, HE Xinxia, et al. Modify of data assimilation model for lake algae dynamic model[J]. Water Resources Protection, 2021, 37(4):156-165.

24. 张亚琼, 何楠, 杨丝雯, 等. 基于演化博弈的水生态 PPP 项目第三方监管策略[J]. 水资源保护, 2021, 37(4):166-172 DOI:10.3880/j.issn.1004-6933.2021.04.024 [摘要(475)] [PDF 1.22 M (337)]
ZHANG Yaqiong, HE Nan, YANG Siwen, et al. Third-party supervision strategy of water ecological PPP project based on evolutionary game theory[J]. Water Resources Protection, 2021, 37(4):166-172.

2021 年第 5 期

1. 张万顺, 张紫倩, 彭虹, 等. 粤港澳大湾区金山湖流域水质变化规律[J]. 水资源保护, 2021, 37(5):1-8DOI:10.3880/j.issn.1004-6933.2021.05.001 [摘要(77)][PDF 11.74 M (119)]
ZHANG Wanshun, ZHANG Ziqian, PENG Hong, et al. Water quality variations of Jinshan Lake Basin in Guangdong, Hong Kong and Macao Great Bay Area[J]. Water Resources Protection, 2021, 37(5):1-8.
2. 曹永强, 李玲慧, 邵薇薇, 等. 珠海市香洲城区降水变化特征及成因分析[J]. 水资源保护, 2021, 37(5):9-15DOI:10.3880/j.issn.1004-6933.2021.05.002 [摘要(74)][PDF 8.40 M (100)]
CAO Yongqiang, LI Linghui, SHAO Weiwei, et al. Analysis on characteristics and causes of precipitation change in Xiangzhou urban area, Zhuhai City[J]. Water Resources Protection, 2021, 37(5):9-15.
3. 何艳虎, 郭红江, 谭倩, 等. 广东省东江流域显著水问题类型识别[J]. 水资源保护, 2021, 37(5):16-21DOI:10.3880/j.issn.1004-6933.2021.05.003[摘要(70)][PDF 1.46 M (96)]
HE Yanhu, GUO Hongjiang, TAN Qian, et al. Type identification of significant types of water problems in the Dongjiang River Basin, Guangdong Province[J]. Water Resources Protection, 2021, 37(5):16-21.
4. 李泽君, 黄本胜, 邱静, 等. 变化环境下韩江生态流量演变特征分析[J]. 水资源保护, 2021, 37(5):22-29DOI:10.3880/j.issn.1004-6933.2021.05.004 [摘要(70)][PDF 7.15 M (96)]
LI Zejun, HUANG Bensheng, QIU Jing, et al. Analysis on evolution characteristics of ecological flow of Hanjiang River under changing environment[J]. Water Resources Protection, 2021, 37(5):22-29.
5. 郑江丽, 李兴拼. 基于协调性的区域水资源承载力评估模型[J]. 水资源保护, 2021, 37(5):30-35DOI:10.3880/j.issn.1004-6933.2021.05.005[摘要(70)][PDF 245.76 K (96)]
ZHENG Jiangli, LI Xingpin. Evaluation model of regional water resources carrying capacity based on coordination[J]. Water Resources Protection, 2021, 37(5):30-35.
6. 黄华, 李茂亿, 陈吟晖, 等. 基于 PLSR 的珠江口城市河流水质高光谱反演[J]. 水资源保护, 2021, 37(5):36-42DOI:10.3880/j.issn.1004-6933.2021.05.006[摘要(66)][PDF 4.37 M (96)]
HUANG Hua, LI Maoyi, CHEN Yinhui, et al. Water quality retrieval by hyperspectral for city rivers in Pearl River Estuary based on partial least squares regression[J]. Water Resources Protection, 2021, 37(5):36-42.
7. 李深林, 洪昌红, 邱静, 等. 广东省不同区域污水资源化建设需求分析[J]. 水资源保

护, 2021, 37(5):43-47DOI:10.3880/j.issn.1004-6933.2021.05.007[摘要(67)][PDF 185.59 K (99)]

LI Shenlin, HONG Changhong, QIU Jing, et al. Demand analysis of sewage reclamation construction in different regions of Guangdong Province[J]. Water Resources Protection, 2021, 37(5):43-47.

8. 董斯齐, 黄翀, 李贺, 等. 粤港澳大湾区 2015—2019 年入海河口水质变化趋势[J]. 水资源保

护, 2021, 37(5):48-55DOI:10.3880/j.issn.1004-6933.2021.05.008[摘要(67)][PDF 4.37 M (99)]

DONG Siqi, HUANG Chong, LI He, et al. Change trend of water quality in estuaries of Guangdong, Hong Kong and Macao Greater Bay Area from 2015 to 2019[J]. Water Resources Protection, 2021, 37(5):48-55.

9. 陈华鑫, 陆沈钧, 何建兵, 等. 长三角一体化示范区水资源保护协作机制创新研究[J]. 水资源保

护, 2021, 37(5):56-61DOI:10.3880/j.issn.1004-6933.2021.05.009 [摘要(67)][PDF 187.09 K (94)]

CHEN Huaxin, LU Shenjun, HE Jianbing, et al. Research on innovation of water resources protection cooperation mechanism in Yangtze River Delta integration demonstration area[J]. Water Resources Protection, 2021, 37(5):56-61.

10. 高丽莎, 高程程, 汪涛. 基于精细化河网水动力模型的长宁区除涝能力评估[J]. 水资源保

护, 2021, 37(5):62-67DOI:10.3880/j.issn.1004-6933.2021.05.010 [摘要(69)][PDF 3.76 M (97)]

GAO Lisha, GAO Chengcheng, WANG Tao. Assessment of waterlogging control capacity in Changning District based on refined river network hydrodynamic model[J]. Water Resources Protection, 2021, 37(5):62-67.

11. 安东, 宋倍, 吴宝国. 塔里木河流域信息化资源整合实践与成效[J]. 水资源保

护, 2021, 37(5):68-74DOI:10.3880/j.issn.1004-6933.2021.05.011 [摘要(67)][PDF 11.42 M (99)]

AN Dong, SONG Bei, WU Baoguo. Practices and benefits of intergrating information resources in Tarim River Basin[J]. Water Resources Protection, 2021, 37(5):68-74.

12. 白岗岗, 侯精明, 韩浩, 等. 基于深度学习的道路积水智能监测方法[J]. 水资源保

护, 2021, 37(5):75-80DOI:10.3880/j.issn.1004-6933.2021.05.012 [摘要(67)][PDF 10.49 M (102)]

BAI Ganggang, HOU Jingming, HAN Hao, et al. Intelligent monitoring method for road inundation based on deep learning[J]. Water Resources Protection, 2021, 37(5):75-80.

13. 张袁宁, 孙博闻, 高学平, 等. 水环境涡动相关通量观测技术的实现与应用[J]. 水资源保

护, 2021, 37(5):81-88DOI:10.3880/j.issn.1004-6933.2021.05.013[摘要(65)][PDF 1.06 M (93)]

ZHANG Yuanning, SUN Bowen, GAO Xueping, et al. Realization and application of aquatic eddy correlation flux observation technique[J]. Water Resources Protection, 2021, 37(5):81-88.

14. 卢家波, 向小华, 李超, 等. GIS 中的通用水文模型数据结构研究[J]. 水资源保护, 2021, 37(5):89-93DOI:10.3880/j.issn.1004-6933.2021.05.014[摘要(65)][PDF 2.03 M (97)]
LU Jiabo, XIANG Xiaohua, LI Chao, et al. Research on data structure of general hydrological model in GIS[J]. Water Resources Protection, 2021, 37(5):89-93.
15. 张珂, 张企诺, 陈新宇, 等. 栅格新安江-地表地下双人工调蓄分布式水文模型[J]. 水资源保护, 2021, 37(5):94-101DOI:10.3880/j.issn.1004-6933.2021.05.015[摘要(67)][PDF 7.28 M (99)]
ZHANG Ke, ZHANG Qينو, CHEN Xinyu, et al. Gridded Xin'anjiang-dual anthropogenic aboveground and underground regulation distributed hydrological model[J]. Water Resources Protection, 2021, 37(5):94-101.
16. 洪思扬, 王红瑞, 梁俊芬, 等. 京津冀地区水-能源利用效率与资源压力核算[J]. 水资源保护, 2021, 37(5):102-111DOI:10.3880/j.issn.1004-6933.2021.05.016[摘要(65)][PDF 3.23 M (94)]
HONG Siyang, WANG Hongrui, LIANG Junfen, et al. Calculation of energy-water utilization efficiency and resource pressure in Beijing-Tianjin-Hebei region[J]. Water Resources Protection, 2021, 37(5):102-111.
17. 原彩萍, 刘原一, 职璐爽. 基于模糊集对法的山西省水资源脆弱性评价[J]. 水资源保护, 2021, 37(5):112-116DOI:10.3880/j.issn.1004-6933.2021.05.017[摘要(67)][PDF 185.57 K (95)]
YUAN Caiping, LIU Yuanyi, ZHI Lushuang. Water resources vulnerability assessment in Shanxi Province based on fuzzy set pair method[J]. Water Resources Protection, 2021, 37(5):112-116.
18. 闫佳伟, 王红瑞, 赵伟静, 等. 我国矿井水资源化利用现状及前景展望[J]. 水资源保护, 2021, 37(5):117-123DOI:10.3880/j.issn.1004-6933.2021.05.018[摘要(65)][PDF 1.10 M (95)]
YAN Jiawei, WANG Hongrui, ZHAO Weijing, et al. Current status and prospect of mine water reutilization in China[J]. Water Resources Protection, 2021, 37(5):117-123.
19. 魏卿, 薛联青, 王桂芳, 等. 玛纳斯河流域用水结构时空演化及水资源空间匹配分析[J]. 水资源保护, 2021, 37(5):124-130DOI:10.3880/j.issn.1004-6933.2021.05.019[摘要(68)][PDF 4.89 M (97)]
WEI Qing, XUE Lianqing, WANG Guifang, et al. Spatial and temporal evolution of water structure and spatial matching analysis of water resources in Manas River Basin[J]. Water Resources Protection, 2021, 37(5):124-130.

20. 雷向东, 赖成光, 王兆礼, 等. LID 改造对城市内涝与面源污染的影响[J]. 水资源保护, 2021, 37(5):131-139DOI:10.3880/j.issn.1004-6933.2021.05.020[摘要(69)][PDF 5.42 M (95)]
LEI Xiangdong, LAI Chengguang, WANG Zhaoli, et al. Influence of LID adaptation on urban flooding and non-point source pollution[J]. Water Resources Protection, 2021, 37(5):131-139.
21. 罗小林, 尹长文, 张国新, 等. 北京市水环境现状及流域综合治理措施[J]. 水资源保护, 2021, 37(5):140-146DOI:10.3880/j.issn.1004-6933.2021.05.021[摘要(68)][PDF 223.70 K (97)]
LUO Xiaolin, YIN Changwen, ZHANG Guoxin, et al. Water environment status and comprehensive management measures of watershed in Beijing[J]. Water Resources Protection, 2021, 37(5):140-146.
22. 王利娜, 周俊丽, 赵艳芳, 等. 海河流域中部表层沉积物中重金属分布特征及污染评价[J]. 水资源保护, 2021, 37(5):147-152DOI:10.3880/j.issn.1004-6933.2021.05.022[摘要(66)][PDF 2.06 M (95)]
WANG Lina, ZHOU Junli, ZHAO Yanfang, et al. Distribution characteristics and pollution assessment of heavy metals in the surface sediments in the middle of Haihe River Basin[J]. Water Resources Protection, 2021, 37(5):147-152.
23. 马景, 武周虎, 邹艳均, 等. 基于灰色马尔科夫模型的南四湖水质预测[J]. 水资源保护, 2021, 37(5):153-158DOI:10.3880/j.issn.1004-6933.2021.05.023[摘要(64)][PDF 460.12 K (97)]
MA Jing, WU Zhouhu, ZOU Yanjun, et al. Water quality prediction of Nansi Lake based on grey Markov model[J]. Water Resources Protection, 2021, 37(5):153-158.
24. 张彦, 李平, 梁志杰, 等. 灌区水生态环境风险评估研究进展[J]. 水资源保护, 2021, 37(5):159-168DOI:10.3880/j.issn.1004-6933.2021.05.024[摘要(67)][PDF 453.34 K (98)]
ZHANG Yan, LI Ping, LIANG Zhijie, et al. Research progress on risk assessment of water ecological environment in irrigation districts[J]. Water Resources Protection, 2021, 37(5):159-168.
25. 孙子日哈, 尚福强, 吴得卿, 等. 基于水生态系统平衡的郟城南湖水体生态净化方案[J]. 水资源保护, 2021, 37(5):169-176DOI:10.3880/j.issn.1004-6933.2021.05.025[摘要(71)][PDF 1.17 M (97)]
SUN Ziriha, SHANG Fuqiang, WU Deqing, et al. Water ecological purification scheme of Yuncheng Nanhu Lake based on water ecosystem balance[J]. Water Resources Protection, 2021, 37(5):169-176.