

湖泊科学

(Hupo Kexue)

2022 年 第 34 卷 第 5 期 9 月 6 日

目 次

专 稿

- “引江济太”20 年:工程实践、成效和未来挑战 (1393)
吴浩云,甘月云,金 科

综 述

- 小流域农业面源污染监测断面设置与污染物通量估算研究进展 (1413)
李 影,秦丽欢,雷秋良,罗加法,杜新忠,闫铁柱,刘宏斌
铁(氢)氧化物介导的溶解性有机质、无机磷的固定及相互作用研究进展 (1428)
文帅龙,刘静静,戴家如,黄秀琳,安世林,刘正文,杜瑛珣

研究论文

——富营养化与水华防控

- 2016—2020 年长江中游典型湖泊水质和富营养化演变特征及其驱动因素 (1441)
赵晏慧,李 韬,黄 波,冯艳玲,雷明军,卓海华,吴云丽
寡一中营养型水体偶发性蓝藻水华的驱动因素分析——以南京方便水库为例 (1452)
陈文权,孟洋洋,单延功,李香华,王 炜,张 氏
氮磷比对微囊藻与栅藻磷赋存及分配的影响 (1461)
谭 啸,石 琳,段志鹏,曾庆飞,李聂贵,强 娟
太湖流域浮游植物功能类群分布特征及其与环境因子的关系 (1471)
罗敏纳,孙蓓丽,朱冰川,宋 挺,蔡 琨,吕学研,张 咏,张 玮,石浚哲,张虎军,刘 妍,陆欣鑫,
范亚文,张军毅
不同生长型沉水植物配置对生物量积累和水质净化效果的影响 (1484)
胡 傲,李宇辉,杨予静,彭秋桐,李中强

——生物地球化学与水环境保护

- 太湖入、出湖湖区磷的特征及其影响因素分析 (1493)
蔡 梅,钱 旭,王元元,陆志华,张 玮
基于改进 SWAT 模型的灌溉—施肥—耕作对乌梁素海流域营养物负荷及作物产量的影响 (1505)
王维刚,史海滨,李仙岳,孙亚楠,张文聪,周 慧
典型网状河网区域土地利用和景观格局对地表季节水质的影响——以江苏省溧阳市为例 (1524)
张志敏,杜景龙,陈德超,张 飞
珠江流域东江(东莞段)溶解氧时空变化及其影响因素 (1540)
徐 闯,刘广州,陈晓宏
不同来源有色溶解性有机物光化学/微生物降解过程 (1550)
张怡恒,庞 锐,任源鑫,程丹东

湿地植物固体碳源养分释放动态及其对人工湿地水体脱氮效率的影响	(1562)
谭佩阳,侯志勇,谢永宏,李 峰,杨 扬,陈 薇,李 阳	
乌梁素海冰封期溶解氧的平衡性分析	(1570)
张 帆,史小红,赵胜男,郝若男,翟佳伦	
——淡水生态与生物多样性保育	
鄱阳湖夏季极端水位条件下越冬水鸟多样性、空间分布及其保护对策	(1584)
张 超,李言阔,任 琼,单继红,王贤芳,方彭军,邵瑞清,申 锦,钱 磊,李安梅,塔 旗	
长江中下游升金湖湿地越冬鸭属(<i>Anas</i>)鸟类群落结构和行为特征	(1596)
范少军,周立志,于 超	
我国 8 个水电站 15 种过鱼对象游泳能力研究	(1608)
柯森繁,金志军,李志敏,雷青松,王永猛,石小涛,涂志英	
东太湖浮游植物与浮游动物群落的嵌套性及其互作网络的季节特征	(1620)
胡 洋,张亚洲,姜星宇,邵克强,汤祥明,高 光	
渭河干流与其秦岭北麓典型支流浮游动物群落结构及影响因素	(1630)
陈 越,潘保柱,吴 利,胡 恩,赵耿楠,张 森	
抚仙湖垂向分层期间水体细菌群落结构组成及多样性的空间分布	(1642)
周天旭,罗文磊,笪 俊,吴 琼,余春艳,李化炳	
——流域水文与水资源安全	
基于半偏联系数和动态减法集对势的区域水资源承载力评价方法	(1656)
李 征,金菊良,崔 毅,周戎星,宁少尉,周玉良,周亮广	
基于水质-水位二元响应关系推求过水型湖泊适宜生态水位研究	(1670)
张天衍,董增川,罗 贇,石晴宜,韩亚雷,崔 璨,周 强,张 游	
三峡水库影响下长江中下游水文干旱演变及对气象干旱的响应	(1683)
李峥嵘,彭 涛,林青霞,董晓华,刘 冀,常文娟,喻 丹,王高旭	
1958—2017 年太湖蒸发量年际变化趋势及主控因子	(1697)
荆思佳,肖 薇,王晶苑,郑有飞,王 伟,刘 强,张 圳,胡 诚	
鄱阳湖汇流顶托对长江汉口水位影响的量化分析	(1712)
张明月,邓鹏鑫,王磊之,酆建平,张冬冬,程小翠	
——河湖沉积与全球变化响应	
岩芯 XRF 扫描在湖泊年纹层研究中的应用——以青藏高原东南缘新路海为例	(1723)
秦 蓉,刘丽媛,王晶晶,刘兴起,张 琪,冯盛楠	
云南云龙天池枝角类群落演替对 1950s 以来人类活动影响信号的识别	(1735)
索 旗,陈光杰,孔令阳,徐会明,李 静,张 涛,王 露,周 起,郑 昕	
近百年来湖泊有机碳与无机碳埋藏响应流域开发的协同变化——以石林喀斯特地区为例	(1751)
王 露,陈光杰,黄林培,孔令阳,李 蕊,韩桥花,李 平,索 旗,周 起	

(本期责任编辑:杨柳;英文编辑:董旭辉)

Journal of Lake Sciences

(ISSN 1003-5427)

Volume 34 Issue 5; September 6, 2022

Contents

Feature article

- A retrospect on the water diversion project from Yangtze River to Lake Taihu during 2002–2021: Practices, achievements and future challenges 1393
Wu Haoyun, Gan Yueyun & Jin Ke

Review

- Review on agricultural non-point source pollution monitoring sections layout and pollutant loading estimation in small watershed 1413
Li Ying, Qin Lihuan, Lei Qiuliang, Luo Jiafa, Du Xinzhong, Yan Tiezhu & Liu Hongbin
- Iron (hydr)oxides mediated immobilization and interaction of dissolved organic matter and inorganic phosphate: A review 1428
Wen Shuailong, Liu Jingjing, Dai Jiaru, Huang Xiulin, An Shilin, Liu Zhengwen & Du Yingxun

Research papers

—Eutrophication, bloom prevention and control

- Evolution characteristics and driving factors of water quality and eutrophication of typical lakes in the middle reaches of the Yangtze River from 2016 to 2020 1441
Zhao Yanhui, Li Tao, Huang Bo, Feng Yanling, Lei Mingjun, Zhuo Haihua & Wu Yunli
- The driving forces of sporadic cyanobacterial blooms in oligo-meso trophic waters: A case study of Fangbian Reservoir, Nanjing 1452
Chen Wenquan, Meng Yangyang, Shan Yangong, Li Xianghua, Wang Wei & Zhang Min
- Influence of N:P ratio on the phosphorus accumulation and distribution of *Microcystis* and *Scenedesmus* 1461
Tan Xiao, Shi Lin, Duan Zhipeng, Zeng Qingfei, Li Niegui & Qiang Juan
- Distribution characteristics of phytoplankton functional groups and their relationship with environmental factors in Taihu Basin 1471
Luo Minna, Sun Beili, Zhu Bingchuan, Song Ting, Cai Kun, Lv Xueyan, Zhang Yong, Zhang Wei, Shi Junzhe, Zhang Hujun, Liu Yan, Lu Xinxin, Fan Yawen & Zhang Junyi
- Effects of different growth form submerged macrophyte assemblages on biomass accumulation and water purification 1484
Hu Ao, Li Yuhui, Yang Yujing, Peng Qiutong & Li Zhongqiang

—Biogeochemistry and aquatic environment protection

- Phosphorus cycle and its influencing factors in different areas of Lake Taihu 1493
Cai Mei, Qian Xu, Wang Yuanyuan, Lu Zhihua & Zhang Wei
- Effects of irrigation-fertilization-tillage on nutrient loading and crop yield in Ulansuhai watershed based on improved SWAT model 1505
Wang Weigang, Shi Haibin, Li Xian Yue, Sun Yanan, Zhang Wencong & Zhou Hui
- Effects of land use and landscape pattern characteristics on seasonal surface water quality in a typical reticulated river network area—a case study of Liyang City, Jiangsu Province 1524
Zhang Zhimin, Du Jinglong, Chen Dechao & Zhang Fei
- Spatiotemporal variations and influencing factors of river dissolved oxygen in Dongguan section of Dongjiang River, Pearl River Basin 1540
Xu Chuang, Liu Guangzhou & Chen Xiaohong
- Photochemical and microbial alteration of chromophoric dissolved organic matter (CDOM) in aquatic ecosystems associated with different sources 1550
Zhang Yixuan, Pang Rui, Ren Yuanxin & Cheng Dandong

Dynamics of nutrient release from solid carbon sources of wetland plants and its effect on the efficiency of nitrogen removal from artificial wetland water bodies	1562
Tan Peiyang, Hou Zhiyong, Xie Yonghong, Li Feng, Yang Yang, Chen Wei & Li Yang	
Equilibrium analysis of dissolved oxygen in Lake Wuliangsu during ice-covered period	1570
Zhang Fan, Shi Xiaohong, Zhao Shengnan, Hao Ruonan & Zhai Jialun	
<i>—Freshwater ecology and biodiversity conservation</i>	
Species diversity, spatial distribution and protection strategies of wintering waterbirds after extreme summer flood in Lake Poyang	1584
Zhang Chao, Li Yankuo, Ren Qiong, Shan Jihong, Wang Xianfang, Fang Pengjun, Shao Ruiqing, Shen Jin, Qian Lei, Li Anmei & Ta Qi	
Community structure and behavioral characteristics of wintering dabbling ducks (<i>Anas</i>) at Lake Shengjin, the middle and lower reaches of the Yangtze River floodplain	1596
Fan Shaojun, Zhou Lizhi & Yu Chao	
Swimming ability of fifteen target fish from eight hydropower stations in China	1608
Ke Senfan, Jin Zhijun, Li Zhimin, Lei Qingsong, Wang Yongmeng, Shi Xiaotao & Tu Zhiying	
Seasonal characteristics of nestedness pattern and interaction of plankton assemblages in East Lake Taihu	1620
Hu Yang, Zhang Yazhou, Jiang Xingyu, Shao Keqiang, Tang Xiangming & Gao Guang	
Zooplankton community structure and influencing factors in Weihe River mainstem and its tributaries from the northern foot of Qinling Mountains	1630
Chen Yue, Pan Baozhu, Wu Li, Hu En, Zhao Gengnan & Zhang Sen	
Spatial distribution of bacterioplankton community composition and their diversity in Lake Fuxian during thermal stratification period	1642
Zhou Tianxu, Luo Wenlei, Da Jun, Wu Qiong, Yu Chunyan & Li Huabing	
<i>—Catchment hydrology and water resources security</i>	
Evaluation method of regional water resources carrying capacity based on semipartial connection number and dynamic subtraction set pair potential	1656
Li Zheng, Jin Juliang, Cui Yi, Zhou Rongxing, Ning Shaowei, Zhou Yuliang & Zhou Liangguang	
Optimum ecological water level of water-carrying lake based on the relationship between water quality and water level	1670
Zhang Tianyan, Dong Zengchuan, Luo Yun, Shi Qingyi, Han Yalei, Cui Can, Zhou Qiang & Zhang You	
Hydrological drought evolution and its response to meteorological drought in the middle-lower reach of the Yangtze River triggered by Three Gorges Reservoir	1683
Li Zhengrong, Peng Tao, Lin Qingxia, Dong Xiaohua, Liu Ji, Chang Wenjuan, Yu Dan & Wang Gaoxu	
Evaporation variability and its control factors of Lake Taihu from 1958 to 2017	1697
Jing Sijia, Xiao Wei, Wang Jingyuan, Zheng Youfei, Wang Wei, <u>Liu Qiang</u> , Zhang Zhen & Hu Cheng	
Quantitative analysis of influence of converge jacking in Lake Poyang on the water level in Hankou Section of Yangtze River	1712
Zhang Mingyue, Deng Pengxin, Wang Leizhi, Bing Jianping, Zhang Dongdong & Cheng Xiaocui	
<i>—Sedimentation and global change</i>	
Application of XRF core scanning in varved lake sediments: A case study on Lake Xinluhai in the southeastern margin of Qinghai-Tibetan Plateau	1723
Qin Rong, Liu Liyuan, Wang Jingjing, Liu Xingqi, Zhang Qi & Feng Shengnan	
Cladoceran community succession and identification of anthropogenic signals since 1950s in Lake Tianchi in Yunlong County, northwest Yunnan	1735
Suo Qi, Chen Guangjie, Kong Lingyang, Xu Huiming, Li Jing, Zhang Tao, Wang Lu, Zhou Qi & Zheng Xin	
Synchronic changes of lake organic and inorganic carbon burial in response to catchment development over the past century: A case study of Shilin Karst area	1751
Wang Lu, Chen Guangjie, Huang Linpei, Kong Lingyang, Li Rui, Han Qiaohua, Li Ping, Suo Qi & Zhou Qi	