

湖泊科学

(Hupo Kexue)

2024年 第36卷 第2期 3月6日

目次

专稿

- 湖泊流域生态系统演化对人类世研究的重要意义 (333)
王 荣,张 科,刘建宝,董旭辉,羊向东

综述

- 湖、库水体 CH₄ 冒泡排放研究进展 (339)
康满春,刘 流,刘 佳,肖尚斌

研究论文

——富营养化与水华防控

- 基于 GOCI 数据的太湖蓝藻垂向迁移特征及关键影响因素 (353)
蒙凌凌,林育青,冯 韬,张建云,严晗璐,何木锋,陈求稳
- 输水明渠着生藻类群落结构特征对水动力条件的响应 (364)
段绍祎,杨梦薇,管光华,朱宇轩,毕永红
- 风场对鄱阳湖丰水期表层蓝藻密度的影响 (377)
杨 平,刘聚涛,胡 芳,温春云,文 慧,吴 棠,付莎莎,戴国飞
- 菹草腐解期上覆水浮游细菌群落动态模拟及其环境驱动因子分析 (389)
李昂松,武 闯,朱 琳,徐丽桦,张 劲,李兆华,蔡 伟,冯学高
- 西藏拉鲁湿地浮游植物群落时空分布特征及其驱动因子 (403)
刘 洋,安瑞志,杨 号,张艳秋,陈俊霖,马文强,巴 桑
- 广东新丰江水库极端旱情期浮游藻类功能群特征及与环境因子的关系 (416)
张 辉,彭宇琼,邹贤妮,张婷婷,廖志惠,林小平,乔永民,陈 瑞

——生物地球化学与水环境保护

- 云南九大高原湖泊流域人类活动强度对水质的多尺度影响 (430)
张洪森,角媛梅,陈 凡,张兆年,徐秋娥,陶 妍
- 甲氧氯的水质基准、沉积物质量基准及生态风险评价 (443)
杨虎成,肖宇煌,莫春雷,高 杰,蔡爱民,张泽涛,常 亮,易春瑶
- 富硫型水库沉积物 AVS 和 SEM 空间分布特征及重金属风险评价 (452)
关昊鹏,谢筱婷,陈思睿,邓 莎,陈小强,金 业,林 琳,汪天祥,许士国
- 察汗淖尔表层沉积物 GDGTs 分布特征及影响因素 (467)
卢沛琪,薛 刚,郑艳红

长三角典型城郊流域溶解性有机质的分子特征:以浙江樟溪为例	(477)
李文儒,陈 财,万洁婷,唐剑锋	
鄱阳湖湿地碟形湖-河流水稳定同位素变化特征及其指示意义	(487)
陶士勇,张 翔,夏军强,肖 洋,熊兴基,徐 晶	
亚热带城市湖泊与河流 CO ₂ 气体通量特征及其影响因素	(499)
刘纪明,赵 优,肖启涛,屈 琦,胡又心,李郑杰,易心钰,卢伟志	
——淡水生态与生物多样性保育	
基于底栖动物生物完整性指数的黄河干流生态健康评价	(512)
冯治远,侯易明,阴 琨,金小伟,韩 谔,潘保柱	
基于环境 DNA 技术的黄河流域下游山区河流大型底栖动物群落多样性特征及其影响要素分析	(523)
赵 茜,潘福霞,李 斌,臧小苗,丁 森	
澜沧江下游补远江大型底栖动物群落结构的时空分布及其影响因素	(536)
鲍思敏,张 凯,丁城志,陶 捐,王 军	
不同营养水平下浮游细菌群落对盐度干扰的响应与稳定性	(548)
毛振铎,王洪伟,周天旭,夏炎雷,李化炳,邢 鹏,吴庆龙	
融合星载 LIDAR 系统 GEDI 数据与 Sentinel-2 影像的长江中游洲滩典型禾本科植物高度动态研究	(562)
石 希,夏军强,周美蓉,辛 沛	
——流域水文与水资源安全	
近 60 年洞庭湖水位演变态势研究	(575)
董世杰,李英海,吴 江,杨 恒,李清清	
我国城市湖泊空间分布格局特征分析及影响因素探讨	(587)
李林森,王 涵,刘 凯,宁一航,陈 思,宋春桥	
黄河上游近 60 年水沙变化特征及其影响因素	(602)
张曦泽,杨丽虎,宋献方	
基于 REOF 的两种卫星降水产品 (IMERG 和 MSWEP) 在金沙江流域降水分区尺度精度评估	(620)
薄会娟,林青霞,李 璐,魏 冲,龚成麒	
汛期洪水资源化利用对三峡水库淤积影响研究	(634)
赵汗青,任 实,闫 静,张成潇,刘志武,高 宇	
基于生态系统恢复力的干旱区植被生态需水阈值计算方法与应用	(645)
雷逸甦,粟晓玲,褚江东,张 特,刘雨翰	

(本期责任编辑:梅琴;英文编辑:董旭辉)

Journal of Lake Sciences

(ISSN 1003-5427)

Volume 36 Issue 2; March 6, 2024

Contents

Feature article

- The importance of lake ecosystem evolution for anthropocene research 333
Wang Rong, Zhang Ke, Liu Jianbao, Dong Xuhui & Yang Xiangdong

Reviews

- Methane ebullition from lakes and reservoirs: A review 339
Kang Manchun, Liu Liu, Liu Jia & Xiao Shangbin

Research papers

—*Eutrophication, bloom prevention and control*

- Vertical migration characteristics and key influencing factors of cyanobacteria in Lake Taihu based on GOCI data 353

Meng Lingling, Lin Yuqing, Feng Tao, Zhang Jianyun, Yan Hanlu, He Shufeng & Chen Qiuwen

- Response of periphytic algae community structure characteristics to hydrodynamic conditions in an open channel 364

Duan Shaoyi, Yang Mengwei, Guan Guanghua, Zhu Yuxuan & Bi Yonghong

- Influence of wind field on surface cyanobacteria density of Lake Poyang in wet season, China 377

Yang Ping, Liu Jutao, Hu Fang, Wen Chunyun, Wen Hui, Wu Jiang, Fu Shasha & Dai Guofei

- Simulation of bacterioplankton community dynamics and their environmental driving factors in overlying water during *Potamogeton crispus* decomposition 389

Li Angsong, Wu Chuang, Zhu Lin, Xu Lihua, Zhang Jin, Li Zhaohua, Cai Wei & Feng Xuegao

- Spatial-temporal distribution characteristics and its driving factors of phytoplankton community in Lhalu Wetland, Tibet, China 403

Liu Yang, An Ruizhi, Yang Hao, Zhang Yanqiu, Chen Junlin, Ma Wenqiang & Ba Sang

- Characteristics of phytoplankton functional groups and their relationships with environmental factors during extreme drought in Xinfengjiang Reservoir, Guangdong Province 416

Zhang Hui, Peng Yuqiong, Zou Xianni, Zhang Tingting, Liao Zhihui, Lin Xiaoping, Qiao Yongmin & Chen Rui

—*Biogeochemistry and aquatic environment protection*

- Multi-scale impacts of human activity intensity on water quality in nine plateau lake basins in Yunnan Province 430

Zhang Hongsen, Jiao Yuanmei, Chen Fan, Zhang Zhaonian, Xu Qiu'e & Tao Yan

- Research on water quality criteria, sediment quality criteria and ecological risk assessment of methoxychlor 443
Yang Hucheng, Xiao Yuhuang, Mo Chunlei, Gao Jie, Cai Aimin, Zhang Zetao, Chang Liang & Yi Chunyao

- Distribution characteristic and risk assessment of acid volatile sulfide and heavy metals in sulfate-rich reservoir sediment 452

Guan Haopeng, Xie Xiaoting, Chen Sirui, Deng Sha, Chen Xiaoqiang, Jin Ye, Lin Lin, Wang Tianxiang & Xu Shiguo

Distributions of GDGTs and its influencing factors in surface sediments of Lake Chahannaoer Lu Peiqi, Xue Gang & Zheng Yanhong	467
Molecular characteristics of dissolved organic matter in a typical peri-urban watershed in the Yangtze River Delta: A case study of Zhangxi watershed in Zhejiang Province Li Wenru, Chen Cai, Wan Jieting & Tang Jianfeng	477
Variations of stable isotopic characteristics of shallow lake-river water system and its indicative significance in Lake Poyang wetland, China Tao Shiyong, Zhang Xiang, Xia Junqiang, Xiao Yang, Xiong Xingji & Xu Jing	487
Characteristics and influencing factors of CO ₂ flux in subtropical urban lakes and river Liu Jiming, Zhao You, Xiao Qitao, Qu Qi, Hu Youxin, Li Zhengjie, Yi Xinyu & Lu Weizhi	499
<i>—Freshwater ecology and biodiversity conservation</i>	
Ecological health assessment of the Yellow River mainstem based on benthic macroinvertebrate index of biological integrity Feng Zhiyuan, Hou Yiming, Yin Kun, Jin Xiaowei, Han Xu & Pan Baozhu	512
Distribution patterns of macroinvertebrate community diversity and their impact factors analysis in mountainous rivers at lower Yellow River Basin based on environmental DNA technology Zhao Qian, Pan Fuxia, Li Bin, Zang Xiaomiao & Ding Sen	523
Spatio-temporal variation and influencing factors of macroinvertebrate community structure in Buyuan River, a tributary of the lower Lancang River Bao Simin, Zhang Kai, Ding Chengzhi, Tao Juan & Wang Jun	536
Response and stability of bacterioplankton community under different nutrient levels with salinity disturbance Mao Zhendu, Wang Hongwei, Zhou Tianxu, Xia Yanlei, Li Huabing, Xing Peng & Wu Qinglong	548
Integrating GEDI and Sentinel-2 data for mapping height dynamics of floodplain representative Poaceae vegetation in the Middle Yangtze River Shi Xi, Xia Junqiang, Zhou Meirong & Xin Pei	562
<i>—Catchment hydrology and water resources security</i>	
Water level changes of Lake Dongting in recent 60 years Dong Shijie, Li Yinghai, Wu Jiang, Yang Heng & Li Qingqing	575
The analysis of spatial distribution pattern of Chinese urban lakes and its influence factors Li Linsen, Wang Han, Liu Kai, Ning Yihang, Chen Si & Song Chunqiao	587
Runoff and sediment load changes in the upper Yellow River and their influencing factors in recent 60 years Zhang Xize, Yang Lihu & Song Xianfang	602
Accuracy evaluation of two satellite precipitation products (IMERG and MSWEP) at precipitation zoning scale based on REOF in the Jinsha River Basin Bo Huijuan, Lin Qingxia, Li Lu, Wei Chong & Gong Chengqi	620
The influence of flood resource utilization on sediment deposition in Three Gorges Reservoir Zhao Hanqing, Ren Shi, Yan Jing, Zhang Chengxiao, Liu Zhiwu & Gao Yu	634
Calculation method and application of ecological water demand threshold for vegetation in arid areas based on ecosystem resilience Lei Yisu, Su Xiaoling, Chu Jiangdong, Zhang Te & Liu Yuhan	645