

## 目 次

### “环境 DNA 与生态健康评估”专栏

- 1 基于环境 DNA 技术的长江上游重庆市江北段鱼类多样性研究  
董智玲, 陈莎莎, 吕宏森, 张连博, 姚维志, 何文平
- 16 基于 cDNA 技术的太湖鱼类多样性调查  
刘燕山, 孙晶莹, 朱明胜, 李大命, 唐晟凯, 钟立强, 张增, 王超群, 沈冬冬

### “第八届全国生态毒理学大会”专栏

- 27 2 种氟喹诺酮类抗生素与群体感应抑制剂对 *E. coli* 的联合毒性效应  
赵远帆, 张瑾, 曾健平, 张静, 张颖

### “第六届 PBTS 国际研讨会”专栏

- 39 PFOS 及其新型替代物 OBS 的生态毒理研究进展  
杨云慧, 张博翔, 田明明, 徐丹

### “新污染物筛查与评估”专栏

- 51 欧盟化学物质风险评估与风险管理要点分析  
葛海虹, 胡俊杰, 赵静, 汪丹, 刘子夜, 舒耀皋
- 60 斑马鱼中高通量毒性测试方法研究进展和应用现状  
王成金, 吕琳, 张玉琳, 熊忆茗, 陈宣樾, 秦占芬, 王燕飞, 林军
- 68 美国替代品评估方法及其对我国新污染物治理的启示  
胡俊杰, 赵静, 葛海虹, 潘寻, 李仓敏
- 79 从筛选值和用地方式角度探讨我国污染场地风险筛选标准的潜在问题  
蒋皓, 吴启堂
- 91 2020 年后国际新形势下加强我国新污染物治理的对策建议  
赵静, 刘晓建, 杜鹏, 葛海虹, 张彩丽

### 综述

- 98 土壤污染生态阈值研究进展  
代社铃, 姜蓉, 荣丽, 王美娥, 陈卫平
- 112 海草床生态系统中微塑料的检测方法、赋存特征及毒理效应研究进展  
侯帅玲, 樊瑾璐, 任国梁, 邓惠, 赵媛媛, 李佳桐, 赵维斌, 冯丹, 葛成军
- 127 污染场地中挥发性有机物的扩散和人群暴露预测模型研究进展  
张钰萌, 吴倩, 鲍天宇, 王占生, 李颖, 刘晓丹, 丁晓雯
- 140 塑料的微生物降解机理研究进展  
千牧凡, 张妍, 时鹏, 陆媛媛, 彭闯
- 156 微塑料对啮齿动物毒性效应研究进展  
边博浩, 吕艺华, 苏姗姗, 吉日豪, 高艳荣, 赵子龙, 贾玉巧
- 168 微纳米塑料对陆生哺乳动物毒性效应的研究进展  
李盼, 杨玉菲, 薛振, 王令, 路宏朝, 王珊珊, 张涛

### 研究论文

- 177 双酚 S 对斑马鱼幼鱼早期视觉发育的影响  
杨怡欣, 董文彬, 刘文敏, 张晓娜
- 187 基于表面增强拉曼光谱的微纳塑料肝脏内暴露检测方法研究  
王惠桐, 李卿, 陈汉清, 陈瑞, 李晓波
- 196 孕期和哺乳期环境剂量氯氟菊酯暴露对子代雄性小鼠青春期启动的影响  
江燕, 干红雅, 徐伊霖, 潘家婧, 叶小青

- 207 高效氯氰菊酯对秀丽隐杆线虫毒性作用的立体选择性研究  
冯敏,王巧鑫,斯朝金,李华悦,赵甲元,廖颖
- 217 基于转录组测序分析砷暴露影响小鼠认知功能的机制  
原晓红,胡鑫,杨鸣宇,韩明盛,马艳琴
- 225 高卤染料废水采用  $UV/SO_3^{2-}$  工艺减毒过程中的中间产物及其毒性变化规律研究  
任航,熊富忠,李菲菲,陈吕军
- 237 三峡库区消落带土壤中多环芳烃的污染特征、来源分析及生态风险  
闫亮,邹芬芳,刘琳,丁相毅,宋华荣,廖思远,赵高峰
- 245 汞胁迫下雪衣藻的生理活性及其藻源性有机物分析  
艾晓寒,涂晓杰,许萍萍,夏亦雪,毕永红
- 257 煤矸石复垦区不同植物对土壤重金属的修复能力研究  
张晋瑞,白秀梅,李博博,张垚,郭汉清,杨冲
- 269 土壤污染研究领域进展的中文文献调研  
卢媛,郑君焱,韩顺莉,刘庚,戴燕燕,张鹏飞,赵景波
- 283 O,O-二甲基-O-(2,2-二氯乙烯基)磷酸酯对玉足海参幼体的急性毒性和病理学损伤  
谭文婷,曹慕华,梁晓霞,陆惠莲,黄文,原丽红
- 293 草甘膦农药对西藏土壤蓝藻 *Loriellopsis cavernicola* 的光合作用抑制机制研究  
陈子旭,张逸霄,李小燕,吴新国,陈兰洲,王高鸿,彭婷婷
- 302 基于 Web of Science 对土壤介质中抗生素抗性基因的文献计量分析  
冯衍,王章凯,余雪巍,刘天初,顾海萍
- 314 重庆市水环境中抗生素的污染特征及其风险评价  
张文斌,赵晶,张秀,王俭,刘灿,杨海蓉
- 325 西南某含氯碱工业园区土壤-地下水中钡的迁移及人体健康风险评估  
丁嘉文,徐敏,杨刚,王亚婷,刘庆梅,李静文,伍钧
- 337 总目录

## CONTENTS

- 1 Study on Fish Diversity in Chongqing Jiangbei Section of Upper Reaches of Yangtze River Based on Environmental DNA Technology  
Dong Zhiling, Chen Shasha, Lv Hongsen, Zhang Lianbo, Yao Weizhi, He Wenping
- 16 Investigation of Fish Diversity in Lake Taihu Based on eDNA Metabarcoding  
Liu Yanshan, Sun Jingying, Zhu Mingsheng, Li Daming, Tang Shengkai, Zhong Liqiang, Zhang Zeng, Wang Chaoqun, Shen Dongdong
- 27 Joint Toxic Effects of Two Fluoroquinolones Antibiotics and Quorum Sensing Inhibitors on *E. coli*  
Zhao Yuanfan, Zhang Jin, Zeng Jianping, Zhang Jing, Zhang Ying
- 39 Research Progress in Ecotoxicology of PFOS and Its Novel Alternative OBS  
Yang Yunhui, Zhang Boxiang, Tian Mingming, Xu Dan
- 51 Key Points Analysis of EU Chemicals Risk Management and Risk Assessment  
Ge Haihong, Hu Junjie, Zhao Jing, Wang Dan, Liu Ziye, Shu Yaogao
- 60 Research Progress and Application of Middle/High-throughput Toxicity Testing Methods Using Zebrafish  
Wang Chengjin, Lv Lin, Zhang Yulin, Xiong Yiming, Chen Xuanyue, Qin Zhanfen, Wang Yanfei, Lin Jun
- 68 Chemical Alternatives Assessment in the United States and Its Implications for New Pollutants Control in China  
Hu Junjie, Zhao Jing, Ge Haihong, Pan Xun, Li Cangmin
- 79 Discussion on Potential Issues of Risk Controlling Standards of Contaminated Sites in China from Perspectives of Screening Values and Land Uses  
Jiang Hao, Wu Qitang
- 91 Countermeasures and Proposals for Strengthening the New Pollutants Control in China under New International Situation Beyond 2020  
Zhao Jing, Liu Xiaojian, Du Peng, Ge Haihong, Zhang Caili
- 98 Advances in Ecological Thresholds of Soil Contaminants  
Dai Duling, Jiang Rong, Rong Li, Wang Meie, Chen Weiping
- 112 Advances in Detection Methods, Fate Characteristics and Toxicological Effects of Microplastics in Seagrass Ecosystems  
Hou Shuailing, Fan Jinluo, Ren Guoliang, Deng Hui, Zhao Yuanyuan, Li Jiatong, Zhao Weibin, Feng Dan, Ge Chengjun
- 127 Research Progress on Volatile Organic Compounds Diffusion and Population Exposure Prediction Models in Contaminated Cites  
Zhang Yumeng, Wu Qian, Bao Tianyu, Wang Zhansheng, Li Ying, Liu Xiaodan, Ding Xiaowen
- 140 Research Progress on Microbial Degradation Mechanism of Plastics  
Gan Mufan, Zhang Yan, Shi Peng, Lu Yuanyuan, Peng Chuang
- 156 Research Progress on Toxicity of Microplastics to Rodents  
Bian Bohao, Lv Yihua, Su Shanna, Ji Rihao, Gao Yanrong, Zhao Zilong, Jia Yuqiao
- 168 Research Progress of Toxic Effects of Micro-nano Plastics on Terrestrial Mammals  
Li Pan, Yang Yufei, Xue Zhen, Wang Ling, Lu Hongzhao, Wang Shanshan, Zhang Tao
- 177 Effects of Bisphenol S on Early Visual Development of Zebrafish Larvae  
Yang Yixin, Dong Wenbin, Liu Wenmin, Zhang Xiaona
- 187 Surface-Enhanced Raman Spectroscopy-Based Detection Methods of Intrahepatic Exposure of Micro(nano)-Plastics  
Wang Huitong, Li Qing, Chen Hanqing, Chen Rui, Li Xiaobo
- 196 Effects of Cypermethrin Exposure Under Environmental Doses During Pregnancy and Lactation on Puberty Onset in Offspring Male Mice  
Jiang Yan, Gan Hongya, Xu Yilin, Pan Jiajing, Ye Xiaoqing
- 207 Stereoselective Toxicity of Beta-cypermethrin and Its Enantiomer Exposures on *Caenorhabditis elegans*  
Feng Min, Wang Qiaoxin, Si Chaojin, Li Huayue, Zhao Jiayuan, Liao Ying

- 217 Analysis of Mechanism of Arsenic Exposure-induced Cognitive Changes in Mice Based on RNA Sequencing  
Yuan Xiaohong, Hu Xin, Yang Mingyu, Han Mingsheng, Ma Yanqin
- 225 Variation of Intermediates and Toxicity in High Halogen Dye Wastewater During UV/SO<sub>3</sub><sup>2-</sup> Process for Detoxification  
Ren Hang, Xiong Fuzhong, Li Feifei, Chen Lyujun
- 237 Pollution Characteristics, Source Identification and Ecological Risk of Polycyclic Aromatic Hydrocarbons in Soil of Water-Level Fluctuation Zone in The Three Gorges Reservoir  
Yan Liang, Zou Fenfang, Liu Lin, Ding Xiangyi, Song Huarong, Liao Siyuan, Zhao Gaofeng
- 245 Responses of Physiological Activities and Algal Organic Matter of *Chlamydomonas nivalis* to Mercury Stress  
Ai Xiaohan, Tu Xiaojie, Xu Pingping, Xia Yixue, Bi Yonghong
- 257 Remediation Ability of Different Plants to Soil Heavy Metals in Coal Gangué Reclamation Area  
Zhang Jinrui, Bai Xiumei, Li Bobo, Zhang Yao, Guo Hanqing, Yang Chong
- 269 Research Progress of Soil Pollution in Chinese Literatures  
Lu Yuan, Zheng Junyan, Han Shunli, Liu Geng, Dai Yanyan, Zhang Pengfei, Zhao Jingbo
- 283 Acute Toxicity and Pathological Damage of O,O-dimethyl-O-(2,2-dichloroethyl) Phosphate on Juvenile *Holothuria leucospilota*  
Tan Wenting, Cao Muhua, Liang Xiaoxia, Lu Huilian, Huang Wen, Yuan Lihong
- 293 Inhibition Mechanism of Glyphosate Agrichemical on Photosynthesis in Xizang Soil Cyanobacterium *Loriellopsis cavernicola*  
Chen Zixu, Zhang Yixiao, Li Xiaoyan, Wu Xinguo, Chen Lanzhou, Wang Gaohong, Peng Tingting
- 302 A Bibliometric Analysis of Antibiotic Resistance Genes in Soil Media Based on Web of Science  
Feng Yan, Wang Zhangkai, Yu Xuewei, Liu Tianchu, Gu Haiping
- 314 Pollution Characteristics and Risk Assessment of Antibiotics in Water Environment of Chongqing  
Zhang Wenbin, Zhao Jing, Zhang Xiu, Wang Jian, Liu Can, Yang Hairong
- 325 Migration and Human Health Risk Assessment of Barium in Soil-groundwater of An Industrial Park Containing Chlor-alkali Sector in Southwest China  
Ding Jiawen, Xu Min, Yang Gang, Wang Yating, Liu Qingmei, Li Jingwen, Wu Jun
- 337 Total contents