

# 目 次

## 综述

- 1 同步辐射技术在环境纳米金属组学研究中的应用  
史雪倩,李红,白旭,张晨曦,李玉锋,赵甲亭,高愈希
- 12 碳纳米管生殖毒性及其毒作用机制研究进展  
甘俊英,苏雪荣,薛玉英,李强,唐萌
- 21 1985年以来我国重大水体突发污染事件及在线生物监测的必要性分析  
任宗明,彭晓静,樊玉琪,贾瑞宝
- 29 水体突发污染事件的在线生物监测技术研究进展  
任宗明,赵瑞彬,樊玉琪,杨美怡,贾瑞宝,彭晓静
- 42 水体突发污染事件在线生物监测技术的发展和应用分析  
赵瑞彬,彭晓静,贾瑞宝,任宗明
- 53 大气颗粒物中微生物分析方法及分布特征的研究进展  
钱亚利,王森,丁柳屹,袁琪
- 63 六价铬化合物的肝脏毒性及其作用机制研究进展  
王而今,曾明
- 71 PM2.5暴露致机体损伤及其机制研究进展  
严小甜,丁志山
- 81 钴在土壤和植物系统中的迁移转化行为及其毒性  
罗泽娇,夏梦帆,黄唯怡
- 91 金属和非金属纳米材料对四膜虫生物毒性研究  
韩泽洲,苏锐,史楠

## 专论

- 98 PFOS对星形胶质细胞表观遗传调控作用初探  
王若楠,牛小影,王睿珺,秦畅,李亚晨,刘晓晖,邵静
- 106 碲化镉量子点暴露对小鼠凝血相关因子的影响  
胡月,熊亚敏,孔玲,黄沛力
- 113 基于被动采样技术的水体中有机锡污染筛查取证研究  
蔡琪,陈春翌,黄清辉,陈玲
- 122 环境浓度下的混合抗生素对普通小球藻的联合毒性  
王桂祥,张琼,匡少平,李甲亮
- 129 基于高通量分析的长江干流重庆段重点关注污染物筛选  
石运刚,蔡凤珊,陈静华,卓丽,严骁,庄僖,郑晶,刘嘉烈,贾燕
- 140 南京地区污水厂、自来水厂及长江水域 *MCR-1* 和 *NDM-1* 携带菌耐药特征  
王若楠,马奔,王新宇,张媛,曹振华,袁青彬
- 153 牛粪发酵过程中抗生素耐药基因及相关菌群组成变化规律  
邓雯文,杨盛智,何雪萍,晋蕾,龙梅,陈妹娟,邹立扣

- 164 南方典型水源地及水产养殖区抗生素的复合污染特征及生态风险  
卓丽,王美欢,石运刚,王钰钰,庄信,许榕发,任明忠
- 176 孕激素左炔诺孕酮长期低剂量暴露对雄性斑马鱼的生殖毒性  
华江环,韩建,郭勇勇,周炳升
- 187 环境浓度下壬基酚对秀丽隐杆线虫时间依赖性的毒性兴奋效应  
曹雪,李辉,修光利
- 195 基于风险的 Football 组合法在筛选农用地优先控制酞酸酯类污染物的应用  
任幸,于洋,郑玉婷,李仓敏,朱晓晶,林军,纪明山
- 206 不同分子量的腐殖酸存在下 2 种无机砷的生物毒性效应研究  
梁丁元,任金乾,范文宏
- 214 有机化学品生物富集因子定量结构-活性关系模型  
郑玉婷,乔显亮,于洋,林军,丁琼
- 222 诱导型 Hsp70 在外源性甲醛对小鼠肝肾氧化损伤中的保护作用  
安洁然,江清英,李福宏,赵云,丁书茂
- 231 蝴蝶菊水提液对水华蓝藻——卵孢金孢藻的化感作用研究  
杜彩丽,张伟,张军毅,尚光霞,杨丽,王梦梦,王丽卿
- 242 纳米银与银离子对土壤微生物及酶活性的影响  
舒昆慧,张丽,伍玲丽,司友斌
- 251 博斯腾湖流域地下水重金属污染的人体健康风险评估  
艾提业古丽·热西提,麦麦提吐尔逊·艾则孜,王维维,迪力夏提·司马义,艾尼瓦尔·买买提
- 260 视黄酸和多溴联苯醚联合暴露对斑马鱼运动行为的影响  
王余江,樊琳,陈创奇,刘顿,刘风华,陈将飞,黄长江
- 268 纳米氧化镍颗粒对长牡蛎(*Crassostrea gigas*)抗氧化防御体系的影响  
张钰昆,巩宁,车程,邵魁双,王迪,林正志,孙野青
- 280 河流放射性核素水体弥散模型及其应用  
李小飞,张谈贵,张学东,王海山,高健夫,王福军
- 288 邻苯二甲酸二丁酯对 KM 小鼠神经行为学的影响及芒果苷的拮抗作用  
陈艳丽,陈芙蓉,胡元灏,蔡子壕,晏彪
- 298 汽油车尾气亚慢性暴露对小鼠肺的损伤作用  
程志斌,杨峥,刘艳菊,郭青云,朱明淏,钟震宇,李俊芳,单云芳,张鹏骞,刘田

## CONTENTS

- 1 Review of Studies on the Environmental Nanometallomics Using Synchrotron Radiation Techniques  
Shi Xueqian, Li Hong, Bai Xu, Zhang Chenxi, Li Yufeng, Zhao Jiating, Gao Yuxi
- 12 Research Progress on Reproductive Toxicity and the Toxic Mechanism of Carbon Nanotube  
Gan Junying, Su Xuerong, Xue Yuying, Li Qiang, Tang Meng
- 21 A Review on the Water Pollution Incidents from 1985 and the Application Analysis of the Online Biomonitoring Technologies for Water Pollution  
Ren Zongming, Peng Xiaojing, Fan Yuqi, Jia Ruibao
- 29 A Review on the Online Biomonitoring Technology for Water Pollution Incidents  
Ren Zongming, Zhao Ruibin, Fan Yuqi, Yang Meiyi, Jia Ruibao, Peng Xiaojing
- 42 A Review on the Development and Application of the Online Biomonitoring Technologies for Water Pollution Incidents  
Zhao Ruibin, Peng Xiaojing, Jia Ruibao, Ren Zongming
- 53 Advances in Analytical Methods and Distribution Characteristics of Microorganisms in Particulate Matter  
Qian Yali, Wang Sen, Ding Liuyi, Yuan Qi
- 63 Research Overview on Hepatotoxicity and the Related Mechanism of Hexavalent Chromium Compounds  
Wang Erjin, Zeng Ming
- 71 A Review of Organism Injury and Mechanisms from Exposure to PM2.5  
Yan Xiaotian, Ding Zhishan
- 81 The Migration and Transformation of Cobalt in Soil-Plant System and Its Toxicity  
Luo Zejiao, Xia Mengfan, Huang Weiyi
- 91 Biotoxicity of Metal and Non-metal Nanomaterials to *Tetrahymena*  
Han Zezhou, Su Rui, Shi Nan
- 98 Role of Epigenetic Modification in the PFOS Neurotoxicity— A Study in the Rat Primary Astrocytes  
Wang Ruonan, Niu Xiaoying, Wang Ruijun, Qin Chang, Li Yachen, Liu Xiaohui, Shao Jing
- 106 Effects of Exposure to CdTe Quantum Dots on Coagulation-Related Factors in Mice  
Hu Yue, Xiong Yamin, Kong Ling, Huang Peili
- 113 Forensic Fingerprint of Trace Organotin Contamination in the Water Based on Passive Sampling Technology  
Cai Qi, Chen Chunzhao, Huang Qinghui, Chen Ling
- 122 The Joint Toxicity of Mixed Antibiotics on *Chlorella vulgaris* at Normal Environmental Concentration  
Wang Guixiang, Zhang Qiong, Kuang Shaoping, Li Jialiang
- 129 Identifying Priority Pollutants in the Yangtze River in Chongqing City Using High Throughput Screening Approach  
Shi Yungang, Cai Fengshan, Chen Jinghua, Zhuo Li, Yan Xiao, Zhuang Xi, Zheng Jing, Liu Jiale, Jia Yan
- 140 The Antibiotic Resistance Profiles of *MCR-1* and *NDM-1* Hosting Bacteria in a Wastewater Treatment Plant, Drinking Water Treatment Plant and the Yangtze River in Nanjing  
Wang Ruonan, Ma Ben, Wang Xinyu, Zhang Yuan, Cao Zhenhua, Yuan Qingbin
- 153 Change of Antibiotic Resistance Genes and Bacterial Communities during Dairy Manure Composting Process  
Deng Wenwen, Yang Shengzhi, He Xueping, Jin Lei, Long Mei, Chen Shujuan, Zou Likou

- 164 Occurrence, Distribution, and Ecological Risk of Antibiotics in Surface Water of Typical Drinking Water Sources and Aquaculture in South China  
Zhuo Li, Wang Meihuan, Shi Yungang, Wang Yuyu, Zhuang Xi, Xu Rongfa, Ren Mingzhong
- 176 Reproductive Toxicity in Male Zebrafish after Long-term Exposure to Low Concentrations of Progestin Levonorgestrel  
Hua Jianghuan, Han Jian, Guo Yongyong, Zhou Bingsheng
- 187 Time-dependent Hormetic Effects of Nonylphenol on *Caenorhabditis elegans* under Environmental Concentrations  
Cao Xue, Li Hui, Xiu Guangli
- 195 Risk-based Football Combination Method for Screening Priority Control Phthalates in Agricultural Land  
Ren Xing, Yu Yang, Zheng Yuting, Li Cangmin, Zhu Xiaojing, Lin Jun, Ji Mingshan
- 206 Arsenite and Arsenate Toxicity to *Daphnia magna* on the Coexistence of Humic Acid with Different Molecular Weights  
Liang Dingyuan, Ren Jinqian, Fan Wenhong
- 214 Quantitative Structure-Activity Relationship Model for Bioconcentration Factors of Organic Chemicals  
Zheng Yuting, Qiao Xianliang, Yu Yang, Lin Jun, Ding Qiong
- 222 Inducible Hsp70 Protected Liver and Kidney of Mice from the Oxidative Damage Induced by Exogenous Formaldehyde  
An Jieran, Jiang Qingying, Li Fuhong, Zhao Yun, Ding Shumao
- 231 Allelopathic Effects of *Wedelia chinensis* Water Extracts on the Cyanobacterium *Chrysosporum ovalisporum*, a Species Causing Algal Bloom  
Du Caili, Zhang Wei, Zhang Junyi, Shang Guangxia, Yang Li, Wang Mengmeng, Wang Liqing
- 242 Effects of Silver Nanoparticles and Silver Ions on Soil Microorganisms and Enzyme Activities  
Shu Kunhui, Zhang Li, Wu Lingli, Si Youbin
- 251 The Human Health Risk Assessment of Heavy Metal Pollution of Groundwater in Boston Lake Basin  
Atiyagul Rixit, Mamattursun Eziz, Wang Weiwei, Dilxat Ismayil, Anwar Mohammad
- 260 Effects of Co-exposure to Retinoic Acid and PBDEs on Locomotor Behavior in Zebrafish (*Danio rerio*)  
Wang Yujiang, Fan Lin, Chen Chuangqi, Liu Dun, Liu Fenghua, Chen Jiangfei, Huang Changjiang
- 268 Effects of Nickel Oxide Nanoparticles on Antioxidant Defense System of *Crassostrea gigas*  
Zhang Yukun, Gong Ning, Che Cheng, Shao Kuishuang, Wang Di, Lin Zhengzhi, Sun Yeqing
- 280 Modelling the Dispersion of Radionuclide in River Water and Its Application  
Li Xiaofei, Zhang Tangui, Zhang Xuedong, Wang Haishan, Gao Jianfu, Wang Fujun
- 288 Neurobehavioral Effects of Dibutyl-phthalate on KM Mice and the Antagonistic Role of Mangiferin  
Chen Yanli, Chen Furong, Hu Yuanhao, Cai Zihao, Yan Biao
- 298 Subchronic Exposure to Gasoline Vehicle Exhaust Induced Lung Injury in Mice  
Cheng Zhibin, Yang Zheng, Liu Yanju, Guo Qingyun, Zhu Minghao, Zhong Zhenyu, Li Junfang, Shan Yunfang, Zhang Pengqian, Liu Tian