

目 次

综 述

- 1 CRISPR/Cas 系统抵御细菌耐药
徐艳, 崔玉晓, 杨洋, 罗义, 郑向群, 毛大庆
- 9 内分泌干扰物对胰腺发育的影响及其机制研究进展
王洪芳, 赵飞, 王蔚, 汝少国
- 19 有机磷酸酯类阻燃剂毒性效应研究进展
徐怀洲, 王智志, 张圣虎, 郭敏, 陈玫宏, 石利利
- 31 基于土壤模式生物的纳米材料毒理研究进展
王晓科, 石清清, 邓代莉, 蒲生彦
- 42 典型环境内分泌干扰物的来源、环境分布和主要环境过程
杨清伟, 梅晓杏, 孙姣霞, 胡莺
- 56 轮虫在生态毒理学中的研究进展
沙婧婧, 戴媛媛, 潘玉龙, 李娟, 徐兆东, 张继民

专 论

- 71 丛枝菌根真菌砷酸盐还原酶基因 *RiarsC* 的克隆和功能分析
李景龙, 孙玉青, 陈保冬, 李涛, 胡亚军, 张莘
- 78 DEHP 和 MEHP 对 H295R 细胞类固醇激素合成基因表达的影响
叶婷, 董四君, 王佳, 杨丹, 杨文佳, 李灿
- 87 PM_{2.5} 和甲醛联合暴露致小鼠肺损伤及其分子机制的研究
閻静, 赵云, 黄佳伟, 张萍, 潘雯, 尤安琪, 黄希, 杨旭, 李睿
- 94 纳米银和 PVP 包被纳米银对 HepG2 细胞遗传毒性的比较研究
王秀娟, 李婷竹, 陆强, 苏雪荣, 薛玉英, 唐萌
- 103 中国七大水系淡水沉积物中林丹(γ -HCH)的生态风险评估
陈心悦, 张彦峰, 沈兆爽, 祝凌燕
- 112 脱氧雪腐镰刀菌烯醇、黄曲霉毒素 B1 和玉米赤霉烯酮对秀丽隐杆线虫的联合毒性研究
周鸿媛, 唐莉莉, 路勇, 杨惠成, 孙秀兰, 王加生, 钱和
- 122 转 *cry1Ab* 和 *epsps* 基因玉米 C0030.3.5 对大型蚤(*Daphnia magna*)的生态毒性研究
张莉, 韩娟, 刘标
- 129 BaP 和 DDT 暴露对翡翠贻贝胚胎重要酶活性影响的比较研究
林芳, 毛楷林, 江秀, 周海龙
- 138 利用 CRISPR/Cas9 系统敲除斑马鱼 *bco1* 基因与 *bcol1* 基因
李文龙, 冯永永, 李凯彬, 聂湘平
- 146 烧烤场景中基于 PBPK 模型的人群 PAHs 暴露评估
宋韬, 黄青, 徐琪依, 柴源
- 156 对二甲苯对褐牙鲈(*Paralichthys olivaceus*)幼鱼的毒性效应研究
蔺鹏飞, 苗晶晶, 潘鲁青, 林雨霏, 武江越

- 165 纳米氧化铝对斑马鱼幼鱼早期运动行为的影响
贺凯宏,尚楠,陈建平,张萍,张玲,牛侨,张勤丽
- 172 ZnO 纳米粒子通过线粒体通路抑制小鼠光感受器细胞 Na^+/K^+ -ATP 酶表达和活性的作用研究
刘滨,殷学伟,郭励劼,丁红燕,毕宏生,郭大东
- 181 宜兴市莲花荡水系整治工程前后生态健康评价
李增辉,曲丹,孙德智,李本行
- 193 红霉素对连续 3 个世代多刺裸腹溇存活和生殖的影响
储斌,席贻龙,朱凌云,冯若楠
- 201 稻米来源镉对生长期猪的生长特性及不同脏器组织镉蓄积的影响
夏耀耀,黎俊,冯泽猛,龙次民,曾昭英,黄瑞林,印遇龙
- 209 办公室地面灰尘中 PAHs 污染的时间变化规律及人体健康风险
曹治国,王萌萌,王小颖,李道道,孟雪洁,王世华,节建业,董夏妍,苗正,闫广轩,沈墨海
- 220 多氯代苯并噻吩分子空间坐标指数与气相色谱保留时间的 QSPR 研究
张文华,赵继颖,王琼瑶,拦继元,杨林
- 226 北京不同污染天气 $\text{PM}_{2.5}$ 和 PM_{10} 染毒对大鼠生理病理参数的影响
程志斌,刘艳菊,元学奎,李俊芳,单云芳,钟震宇,杨峥,张婷婷,王欣欣
- 241 细颗粒物($\text{PM}_{2.5}$)主要组分模拟溶液对发光细菌的光抑制分析
孙成华,刘保献,鹿海峰,张大伟,洪姗姗,刘康,常森,杜泽瑞
- 253 基于 TLSE 和 QSPR 关系预测 PAHs 和 PCBs 的 LDPE 膜-空气分配系数
朱腾义,李毛,吴晶
- 260 农药类化合物对大型溇的毒性作用模式:与基线毒性化合物比较研究
闫俐辰,王晓红,赵元慧

CONTENTS

- 1 CRISPR/Cas System Resist to Bacterial Resistance
Xu Yan, Cui Yuxiao, Yang Yang, Luo Yi, Zheng Xiangqun, Mao Daqing
- 9 Effects of Endocrine Disrupting Chemicals on Pancreas Development and the Related Mechanisms
Wang Hongfang, Zhao Fei, Wang Wei, Ru Shaoguo
- 19 Research Progress on Toxicity Effects of Organophosphate Flame Retardants
Xu Huaizhou, Wang Zhizhi, Zhang Shenghu, Guo Min, Chen Meihong, Shi Lili
- 31 Review on Toxicology of Nanomaterials Based on Soil Model Organisms
Wang Xiaoke, Shi Qingqing, Deng Daili, Pu Shengyan
- 42 Sources, Distribution and Major Transformation Process of Typical Endocrine Disruptors in the Environment
Yang Qingwei, Mei Xiaoxing, Sun Jiaoxia, Hu Ying
- 56 Research Progress in Using Rotifers in Ecotoxicological Studies
Sha Jingjing, Dai Yuanyuan, Pan Yulong, Li Juan, Xu Zhaodong, Zhang Jimin
- 71 Cloning and Characterization of Arsenate Reductase Gene *RiarsC* from Arbuscular Mycorrhizal Fungi
Li Jinglong, Sun Yuqing, Chen Baodong, Li Tao, Hu Yajun, Zhang Xin
- 78 Effects of DEHP and MEHP on the Expression of Steroidogenic Genes in the H295R Cells
Ye Ting, Dong Sijun, Wang Jia, Yang Dan, Yang Wenjia, Li Can
- 87 Study on the Lung Damage in Mice Induced by a Combined Exposure of PM_{2.5} and Formaldehyde and Its Molecular Mechanism
Ge Jing, Zhao Yun, Huang Jiawei, Zhang Ping, Pan Wen, You Anqi, Huang Xi, Yang Xu, Li Rui
- 94 Comparative Study on the Genetic Toxicity of Nano Silver and PVP Coated Silver Nanoparticles to HepG2 Cells
Wang Xiujuan, Li Tingzhu, Lu Qiang, Su Xuerong, Xue Yuying, Tang Meng
- 103 Ecological Risk Assessment of γ -HCH for Freshwater Sediment of Seven Major River Systems in China
Chen Xinyue, Zhang Yanfeng, Shen Zhaoshuang, Zhu Lingyan
- 112 Study on the Combinatorial Toxicity of Deoxynivalenol, Aflatoxin B₁ and Zearalenone on *Caenorhabditis elegans*
Zhou Hongyuan, Tang Lili, Lu Yong, Yang Huicheng, Sun Xiulan, Wang Jia-sheng, Qian He
- 122 Ecotoxicological Effects of Genetically Modified Maize C0030.3.5 with *cry1Ab* and *epsps* Gene on *Daphnia magna*
Zhang Li, Han Juan, Liu Biao
- 129 Comparative Studies of the Critical Enzymes Activity of *Perna viridis* Embryo Exposed to BaP and DDT
Lin Fang, Mao Kailin, Jiang Xiu, Zhou Hailong
- 138 Next-generation Knock-out Technology of *bco1* and *bco11* Genes in Zebrafish by Using CRISPR/Cas9 System
Li Wenlong, Feng Yongyong, Li Kaibin, Nie Xiangping
- 146 Exposure Assessment on Polycyclic Aromatic Hydrocarbons from Barbecue Scene Based on PBPK Model
Song Tao, Huang Qing, Xu Qiyi, Chai Yuan
- 156 Toxicological Effects of p-Xylene on the Juvenile Flounder (*Paralichthys olivaceus*)
Lin Pengfei, Miao Jingjing, Pan Luqing, Lin Yufei, Wu Jianguye

- 165 Effects of Nano-Alumina on Motor Behaviors of Zebrafish Larva
He Kaihong, Shang Nan, Chen Jianping, Zhang Ping, Zhang Ling, Niu Qiao, Zhang Qinli
- 172 Inhibitory Effects of Zinc Oxide Nanoparticles on Na^+/K^+ -ATP Enzyme Expression and Activity via Mitochondrial Pathway in Murine Photoreceptor Cells
Liu Bin, Yin Xuewei, Guo Lijie, Ding Hongyan, Bi Hongsheng, Guo Dadong
- 181 Ecosystem Health Assessment: A Case Study of Lianhuadang River System before and after the Water Quality Improvement Projects
Li Zenghui, Qu Dan, Sun Dezhi, Li Benhang
- 193 Effects of Erythromycin on Survival and Reproduction of Three Successive Generations of *Moina macrocopa*
Chu Bing, Xi Yilong, Zhu Lingyun, Feng Ruonan
- 201 Effects of Cadmium Supplied via Cadmium Contaminated Rice on the Growth Performance and the Tissues Accumulation of Cadmium in Growing-finishing Pigs
Xia Yaoyao, Li Jun, Feng Zemeng, Long Cimin, Zeng Zhaoying, Huang Ruilin, Yin Yulong
- 209 Time Variation of Polycyclic Aromatic Hydrocarbons in Floor Dust from Office and Corresponding Human Health Risks
Cao Zhiguo, Wang Mengmeng, Wang Xiaoying, Li Xiaoxiao, Meng Xuejie, Wang Shihua, Jie Jianye, Dong Xiayan, Miao Zheng, Yan Guangxuan, Shen Mohai
- 220 QSPR Study for Molecular Spatial Coordinates Index of Poly-chlorinated Dibenzothiophenes and Retention Time of Gas Chromatography
Zhang Wenhua, Zhao Jiyong, Wang Qiongyao, Lan Jiyuan, Yang Lin
- 226 Influence of $\text{PM}_{2.5}$ and PM_{10} Exposure on Physiological and Pathological Parameters of Rats under Different Polluted Weather in Beijing
Cheng Zhibin, Liu Yanju, Qi Xuekui, Li Junfang, Shan Yunfang, Zhong Zhenyu, Yang Zheng, Zhang Tingting, Wang Xinxin
- 241 Luminescent Inhibition Test of Luminous Bacteria with the Simulated Solution of Main Components of $\text{PM}_{2.5}$
Sun Chenghua, Liu Baoxian, Lu Haifeng, Zhang Dawei, Hong Shanshan, Liu Kang, Chang Miao, Du Zerui
- 253 Development of TLSE and QSPR Models for Predicting LDPE-air Partition Coefficients of PAHs and PCBs
Zhu Tengyi, Li Mao, Wu Jing
- 260 The Modes of Action of Agricultural Chemicals to *Daphnia magna*: A Comparative Study with Baseline Compounds
Yan Lichen, Wang Xiaohong, Zhao Yuanhui