



QK1860856

- ◆ 全国中文核心期刊
- ◆ 中国科学引文数据库
- ◆ 中文科技期刊数据库收录期刊
- ◆ 中国期刊全文数据库全文收录期刊
- ◆ 中国生物医学文献数据库 (CBM)
- ◆ 中国学术期刊综合评价数据库统计源期刊
- ◆ 中国科技论文统计源期刊 (中国科技核心期刊)
- ◆ 万方数据—数字化期刊群 (中国核心期刊遴选数据库)

- ◆ RCCSE中国核心学术期刊
- ◆ 美国化学文摘 (CA) 收录期刊
- ◆ 波兰哥白尼索引 (IC) 收录期刊
- ◆ 美国乌利希期刊指南 (Ulrich PD) 收录期刊
- ◆ 美国《剑桥科学文摘 (自然科学)》(CSAI) 收录期刊
- ◆ 日本科学技术振兴机构中国文献数据库 (JST) 收录期刊
- ◆ 英国国际农业与生物科学研究中心数据库 (CABI) 收录期刊

环境科学与技术

Huanjing Kexue yu Jishu

ISSN1003—6504
Vol.41 No.11
2018



Environmental Science & Technology

ISSN 1003-6504



9 771003 650189

11>

万方数据

湖北省生态环境厅 主管
湖北省环境科学研究院 主办

目 次

淡水浮游动物摄食微塑料过程及影响研究
..... 涂烨楠, 凌海波, 吴辰熙, 张凯, 熊雄(1)

不同磷源条件下铜绿微囊藻生长的锰作用特性
..... 王举, 陈荣, 雷振, 沈莹(9)

东平湖沉水植物分布格局及其与环境因子的关系
..... 田翠翠, 吴幸强, 冯闪闪, 蔡启佳, 杨甜甜, 肖邦定(15)

兼具铁氧化功能的好氧反硝化菌脱氮性能研究
..... 卢晓燕, 王亚娥, 李杰, 赵炜, 权海荣, 陈泳帆(21)

底物浓度对微生物电解池阳极膜形成影响
..... 孙和临, 李建昌, 邵琼丽, 郑金柱(27)

SBRC体外模拟法对含砷矿物生物可给性的研究
..... 冯凯, 鲍建国, 孔淑琼, 何蕾(33)

3种有机浸提剂对螯合稳定化飞灰中Ba、Pb、Zn浸出特性的影响
..... 范新秀, 陈璐, 马丽, 王华伟, 孙英杰, 王亚楠, 汉红燕, 武桂芝(44)

江汉油田波动带土壤氮循环功能菌群分析
..... 赵磊, 刘慧(49)

湖北省PM_{2.5}重污染过程天气分型研究
..... 陈璇, 王晓玲, 岳言裕, 陈赛男, 柳草, 李银娥, 王艳杰(54)

佛山地区一次重污染过程的气象影响因子研究
..... 陈辰, 黄锦灿, 陈慧娟, 吴蒙, 余乐福, 朱建军, 范绍佳, 嵇萍, 梁华玲(65)

矿区河流沉积物中砷和镉浸提及浸提液的处理
..... 王婧, 孙瑞川, 盛彦清, 赵国强, 杨剑(72)

偶氮染料脱色菌群的脱色效果及机制研究
..... 周思懿, 郭光, 田芳, 谢静, 丁克强, 杨凤, 刘廷凤, 胡志新, 孔维杰, 刘耕(81)

固定化地衣芽孢杆菌对Pb²⁺的吸附特性研究
..... 张金帆, 杜春艳, 文晓凤, 谭诗杨, 余关龙, 陈宏, 范庆元, 杨毓鑫(87)

纳米双氢氧化物对有机磷农药的吸附与降解
..... 刘乐, 丁一, 冯艳丽, 房耀维, 安红, 吕明生, 王淑军(93)

柠檬酸化学修饰浮萍吸附钍(IV)研究
..... 杨司坤, 向开祥, 马俊, 刘美兰(100)

响应面优化C掺杂TiO ₂ 制备及光催化降解甲基橙	李金英, 朱琳, 孔祥权, 杨春维(105)
铜负载多孔陶粒用于低浓度含磷废水的处理	石稳民, 付有为, 许智, 罗春光, 李道圣, 康建雄(110)
黑臭河道生态治理中生物接触氧化净化槽应用	刘书敏, 薛露肖, 杨珊珊, 黄志金(115)
厌氧氨氧化污泥储存策略研究进展	汪涛, 王贤, 李虎, 袁路子, 罗正, 郭子健(121)
餐厨垃圾厌氧消化系统运行恢复实验分析	曹秀芹, 徐国庆, 袁海光, 张达飞, 江坤(126)
HmimBF ₄ -二乙醇胺复合材料吸收SO ₂ 的研究	刘宝友, 张佩文, 王涛(132)
改性废旧催化剂对燃煤烟气脱砷的试验研究	曾朔涵, 苏会钰, 胡将军(137)
快速检测水样中甲烷含量的气相色谱法	黎柳月, 陈余道, 吴圣华, 蒋灵芝, 程亚平(143)
镉(Ⅱ)-碘化钾-VBB体系的共振散射光谱及分析应用	陈宁华, 杨迎春, 刘琴, 何妍(149)
恶臭假单胞菌PCR检测方法的建立及应用	耿庆华, 强世龙, 张欣媛(155)
2017年广州市大气臭氧激光雷达组网观测分析	黄祖照, 裴成磊, 王宇骏, 陈彦宁, 梁永健, 张天舒, 范广强, 万学平, 胡婷婷, 李展, 李时政(159)
城镇化对碳排放的门槛效应及区域空间分布	王雅楠, 马明义, 陈伟, 王博文(165)
贵州省能源碳排放现状及峰值预测	芦颖, 李旭东, 杨正业(173)
太岳山地生态系统服务功能权衡协同关系研究	荣月静, 杜世勋, 郭新亚, 李霞, 陈骏宇(181)
贵州锰矿区地表水体重金属污染及生态风险评价	马先杰, 陆凤, 陈兰兰, 陈森(191)
太湖流域地表水中多环芳烃的来源解析及风险评价	李涛, 王玉, 徐枫, 徐兆安(198)

CONTENTS

Ingestion and Effects of Microplastics on Freshwater Zooplankton.....	
.....TU Yenan, LING Haibo, WU Chenxi, ZHANG Kai, XIONG Xiong(1)	
Effects of Manganese on Growth of <i>Microcystis aeruginosa</i> under Different Phosphorus Sources.....	
.....WANG Ju, CHEN Rong, LEI Zhen, SHEN Ying(9)	
Relationship Between the Distribution of Submerged Plants and Environment Factors in Dongping Lake.....	
.....TIAN Cuicui, WU Xingqiang, FENG Shanshan, CAI Qijia, YANG Tiantian, XIAO Bangding(15)	
Study on Nitrogen Removal Performance of Aerobic Denitrifying Bacteria with Iron-oxidizing Function.....	
.....LU Xiaoyan, WANG Ya'e, LI Jie, ZHAO Wei, QUAN Hairong, CHEN Yongfan(21)	
Effects of Substrate Concentration on Forming Anode Biofilm of MEC.....	
.....SUN Helin, LI Jianchang, SHAO Qiongli, ZHENG Jingzhu(27)	
Bioaccessibility of Arsenic Bearing Minerals Using <i>in vitro</i> Extraction Method of SBRC.....	
.....FENG Kai, BAO Jianguo, KONG Shuqiong, HE Lei(33)	
Effects of Organic Extractants on Leaching Characteristics of Ba, Pb, Zn from Stabilized Fly Ash under Different pH Conditions.....	
FAN Xinxu, CHEN Lu, MA Li, WANG Huawei, SUN Yingjie, WANG Yanan, HAN Hongyan, WU Guizhi(44)	
Analysis of Soil Nitrogen Functional Bacteria in the Volatility Zone of Jiangnan Oilfield.....	
.....ZHAO Lei, LIU Hui(49)	
Study on Weather Classification of PM _{2.5} Heavy Pollution in Hubei Province.....	
.....CHEN Xuan, WANG Xiaoling, YUE Yanyu, CHEN Sainan, LIU Cao, LI Yin'e, WANG Yanjie(54)	
Study on the Effects of Meteorological Factors of a Heavy Pollution Process in the City of Foshan.....	
CHEN Chen, HUANG Jincan, CHEN Huixian, WU Meng, YU Lefu, ZHU Jianjun, FAN Shaojia, JI Ping, LIANG Hualing(65)	
Extraction of As and Cd in Sediments of Mining Area and the Treatment of Extraction Solution.....	
.....WANG Jing, SUN Ruichuan, SHENG Yanqing, ZHAO Guoqiang, YANG Jian(72)	
Decolorization Effect of Decolorizing Azo Dye Bacterial Consortium and Their Decolorizing Mechanism.....	
.....ZHOU Siyi, GUO Guang, TIAN Fang, XIE Jing, DING Keqiang, YANG Feng, LIU Tingfeng, HU Zhixin, KONG Weijie, LIU Chong(81)	
A Novel Biosorbent Prepared by Fixed <i>Bacillus licheniformis</i> for Pb ²⁺ Removal from Wastewater.....	
ZHANG Jinan, DU Chunyan, WEN Xiaofeng, TAN Shiyang, YU Guanlong, CHEN Hong, FAN Qingyuan, YANG Yuxin(87)	
The Dichlovos Adsorption onto Nano Mg/Fe-Layered Double Hydroxides and Degradation.....	
.....LIU Le, DING Yi, FENG Yanli, FANG Yaowei, AN Hong, LYU Mingsheng, WANG Shujun(93)	
Adsorption of Thorium(IV) from Aqueous Solution Using <i>Lemna minor</i> Modified by Citric Acid.....	
.....YANG Sikun, XIANG Kaixiang, MA Jun, LIU Meilan(100)	

Preparation of Carbon Doped TiO₂ and Photocatalytic Degradation of Methyl Orange with Reaction Surface Method to Optimization
.....LI Jinying, ZHU Lin, KONG Xiangquan, YANG Chunwei(105)

Treatment of Wastewater Containing Low Concentration of Phosphate by Lanthanum Doped Porous Ceramics.....
.....SHI Wenmin, FU Youwei, XU Zhi, LUO Chunguang, LI Daosheng, KANG Jianxiong(110)

Application of Biological Contact Oxidation Purification Tank in the Ecological Treatment of Black and Smelly River.....
.....LIU Shumin, XUE Luxiao, YANG Shanshan, HUANG Zhijin(115)

Research Progress in Anammox Sludge Storage Strategy.....
.....WANG Tao, WANG Xian, LI Hu, YUAN Luzi, LUO Zheng, GUO Zijian(121)

Study on Process Recovery of the Failed Dry Anaerobic Digestion of Food Waste.....
.....CAO Xiuqin, XU Guoqing, YUAN Haiguang, ZHANG Dafei, JIANG Kun(126)

Research on SO₂ Absorption Using HmimBF₄-Diethanolamine Composite Material.....
.....LIU Baoyou, ZHANG Peiwen, WANG Tao(132)

Experimental Study on the Removal of Arsenic from Coal by Modified Waste Catalyst.....
.....ZENG Shuohan, SU Huiyu, HU Jiangjun(137)

A Rapid Gas Chromatography Method for Determination of Methane in Water Sample.....
.....LI Liuyue, CHEN Yudao, WU Shenghua, JIANG Lingzhi, CHENG Yaping(143)

Resonance Scattering Spectra of Cadmium (II)– Potassium Iodide –VBB System and Its Analytical Application.....
.....CHEN Ninghua, YANG Yingchun, LIU Qin, HE Yan(149)

Development and Application of a PCR Detection of *Pseudomonas putida*.....
.....GENG Qinghua, QIANG Shilong, ZHANG Xinyuan(155)

The Networking Observation and Analysis of Atmospheric Ozone Lidars in Guangzhou in 2017.....
.....HUANG Zuzhao, PEI Chenglei, WANG Yujun, CHEN Yanning,
LIANG Yongjian, ZHANG Tianshu, FAN Guangqiang, WAN Xueping, HU Tingting, LI Zhan, LI Shizheng(159)

Threshold Effect of Urbanization on Carbon Emission and Its Regional Spatial Distribution.....
.....WANG Yanan, MA Mingyi, CHEN Wei, WANG Bowen(165)

Current Situation and Peak Forecast of Energy Carbon Emissions in Guizhou Province.....
.....LU Ying, LI Xudong, YANG Zhengye(173)

Study on Synergy and Tradeoff Relationship of Ecosystem Services Function in Taiyue Mountain.....
.....RONG Yuejing, DU Shixun, GUO Xinya, LI Xia, CHEN Junyu(181)

Heavy Metal Pollution of Surface Water–bodies in Guizhou’s Manganese Mining Areas: Characteristics and Ecological Risk As-
sessment.....MA Xianjie, LU Feng, CHEN Lanlan, CHEN Miao(191)

Pollution Characteristics, Source Apportionment and Risk Assessment of Polycyclic Aromatic Hydrocarbons in Surface Water from
Taihu Lake Basin.....LI Tao, WANG Yu, XU Feng, XU Zhao’an(198)



善待臭氧 安享阳光
ACT OZONE FRIENDLY STAY SUN SAFE

中国保护臭氧层行动
Ozone Layer Protection In China

加速淘汰含氢氯氟烃

HCFC ACCELERATED PHASEOUT

2009-2010

基线水平

2009-2010平均值

Baseline

Average of 2009 and 2010 levels

2013

冻结在基线水平
Freeze at baseline

2015

削减基线水平10%
10% reduction of baseline

2020

削减基线水平35%
35% reduction of baseline

2025

削减基线水平67.5%
67.5% reduction of baseline

HCFCs的生产和使用涉及化工、制冷空调、建筑保温、泡沫塑料以及医疗器械等行业的相关产品。加速淘汰HCFCs不仅对保护臭氧层意义重大，也会为减缓全球气候变化带来好处。

HCFC production and consumption involve products in a number of sectors, such as chemical production, refrigeration and air conditioning, building insulation, foam production and medical devices. By accelerating the phaseout of HCFCs, there are potentials for doubling benefits to the ozone and climate.

2030

削减基线水平97.5%
97.5% reduction of baseline

2040

2030-2040年间
允许保留年均2.5%的维修用途

Annual average of 2.5% of baseline
for servicing during 2030-2040