



ISSN 1001-6929
CN 11-1827 / X
CODEN HKYAEZ

第36卷 第5期 (Vol.36 No.5)

2023 / 05

环境科学研究

Research of Environmental Sciences

特色
专题

$PM_{2.5}$ 与 O_3
协同防控科技攻关
成果专题



中华人民共和国生态环境部 主管

中国环境科学研究院 主办

☆ 中文核心期刊

☆ 中国科技核心期刊 (CSTPCD)

☆ 《国家哲学社会科学学术期刊数据库》(NSSD) 收录

★ 国际检索: Scopus、CSA: NS、AJ、CABI、ZR、JST、IC、EBSCOhost 等

☆ 中国科学引文数据库 (CSCD) 收录

☆ RCCSE 中国核心学术期刊

目次

第 36 卷 第 5 期 2023 年 5 月

PM_{2.5}与O₃协同防控科技攻关成果专题

我国重点区域环境大气 VOCs 监测体系现状及发展方向

..... 李跃武, 柴文轩, 赵月, 车祥, 梁思远, 段玉森, 唐桂刚, 高松 (857)

重点工业涂装行业 VOCs 减排路径与潜力评估

..... 王丽娟, 邵霞, 宁森, 郑伟, 董远舟, 唐倩, 丛晓男 (866)

2018—2021 年京津冀及周边地区“2+26”城市 PM_{2.5} 与 O₃ 污染特征及气象影响

..... 荆琦, 盛立芳, 张玮航, 安霞东 (875)

天山北坡典型工业城市冬季大气铵盐污染特征及其赋存形式

..... 何凯杰, 李刚, 程苗苗, 李维军, 杨小阳, 李斌, 何友江 (887)

大气环境

2015—2020 年中国臭氧污染时空演化及其与厄尔尼诺-南方涛动的关系研究

..... 杨艺科, 王晓红, 凌元锦, 陆庆恒, 秦靖蒿, 李晓艺, 于乐江 (895)

北京市夏季近地层臭氧对气温的量化响应关系

..... 唐伽榕, 田润泽, 郭文勇, 张众志, 徐峻, 刘世杰, 张树宪, 马琳琳, 叶子恒, 黄荷卉 (904)

面向减污降碳的集中供热结构调整路径研究 王堃, 纪晓慧, 淡默, 张晓曦, 刘开云, 左朋莱, 秦思达 (913)

水环境

九龙江河口咸淡水混合过程中汞的额外增加与消除 张小丹, 孙鲁闽, 薛凯宁, 邹游, 弓振斌, 袁东星 (922)

厌氧膜生物反应器处理市政污水的产甲烷性能及微生物代谢特征 刘佳乐, 雷振, 崔耀奎, 陈荣 (932)

典型炼化废水微生物功能结构与主要致毒物质响应关系研究

宋佳宇, 张婷婷, 李立君, 李丹丹, 李兴春, 李昀照 (943)

基于SEAR技术的地下含水层石油烃污染修复试验研究

杨思月, 孙亚乔, 毛明, 王杰, 朱欢, 刘宏伟, 杨胜科 (954)

Mo掺杂FeS₂非均相Fenton催化剂的制备及催化性能研究

杨静文, 方小峰, 杨波 (965)

生态环境

静水与流水条件下沉水植物生长对上覆水和沉积物磷迁移的影响

刘子健, 李卫明, 张续同, 张坤, 陈圣盛, 熊伟唯 (975)

盐度与水位双重波动对芦苇去除水中氮磷的影响机理

郑汉杰, 王子博, 朱翔, 杜鹏, 于江华, 谢磊, 彭福全, 王灵 (986)

土壤与固废

木质垃圾与废铁泥制备Fe⁰-BC材料及其对水中Cr(VI)的去除行为

陈超, 刘建国, 赵光琪, 刘美佳, 李丽 (995)

油基岩屑焚烧过程中钡的转化与环境风险研究

黄祥, 彭晓曦, 郭卫广, 韩雨岐, 张力, 侯江, 雍毅 (1006)

环境污染与健康

微塑料环境暴露与人体健康效应研究进展

孙香莹, 庄银, 王玉邦, 许秋瑾, 王成 (1020)

陕西省典型高硒土壤的空间分布及主要农作物硒的含量特征和主要来源研究

郝秉涛, 张湜溪, 雷昆利 (1032)

环境经济与管理

可持续发展目标达成度对中国生态文明建设公众满意度的影响

刘雅莉, 单丽雯, 杜剑卿, 王艳芬 (1042)

尾矿库环境风险管控相关政策分析及建议

王宏洋, 王旭, 陈海燕, 赵晓丽, 沈亚琴, 柳慧芳, 李会仙 (1052)

信息

《环境科学研究》第六届编委会名单 (封二) 2023年六五环境日宣传 (封三)



Contents



Vol.36 No.5 May 2023

Achievements of National Joint Research for Collaborative Control of PM_{2.5} and O₃

VOCs Monitoring System Status and Development Direction in Key Regions of China

.... LI Yuewu, CHAI Wenxuan, ZHAO Yue, CHE Xiang, LIANG Siyuan, DUAN Yusen, TANG Guigang, GAO Song (857)

Assessment of VOCs Emission Reduction Path and Potential of Industrial Coating

..... WANG Lijuan, SHAO Xia, NING Miao, ZHENG Wei, DONG Yuanzhou, TANG Qian, CONG Xiaonan (866)

Characteristics of PM_{2.5} and O₃ Pollution and Related Meteorological Impacts in '2+26' Cities of Beijing-Tianjin-Hebei

and Its Surrounding Areas from 2018 to 2021 JING Qi, SHENG Lifang, ZHANG Weihang, AN Xiadong (875)

Pollution Characteristics and Existence Forms of Ammonium Salt in Winter in Typical Industrial City on North Slope of

Tianshan Mountains HE Kaijie, LI Gang, CHENG Miaomiao, LI Weijun, YANG Xiaoyang, LI Bin, HE Youjiang (887)

Atmospheric Environment

Spatial-Temporal Evolution of Ozone Pollution and Its Relationship with El Niño-Southern Oscillation in China from

2015 to 2020 YANG Yike, WANG Xiaohong, LING Yuanjin, LU Qingheng, QIN Jinghao, LI Xiaoyi, YU Lejiang (895)

Quantitative Relationship between Near-Surface Ozone and Air Temperature over Beijing Area in Summer

..... TANG Jiarong, TIAN Runze,

GUO Wenyong, ZHANG Zhongzhi, XU Jun, LIU Shijie, ZHANG Shuxian, MA Linlin, YE Ziheng, HUANG Hehui (904)

Structural Adjustment Path of Central Heating Sector from Perspective of Synergistic Reduction of Air Pollutants and

CO₂ Emissions WANG Kun, JI Xiaohui, DAN Mo, ZHANG Xiaoxi, LIU Kaiyun, ZUO Penglai, QIN Sida (913)

Water Environment

Addition and Removal of Mercury in Jiulong River Estuary during Mixing of Seawater and Freshwater

..... ZHANG Xiaodan, SUN Lumin, XUE Kaining, ZOU You, GONG Zhenbin, YUAN Dongxing (922)

Study on Process Characteristics and Microorganism of Anaerobic Membrane Bioreactor for Municipal Wastewater

Treatment LIU Jiale, LEI Zhen, CUI Yaokui, CHEN Rong (932)

Relationship between Microbial Diversity and Main Toxic Substances in Typical Refinery Wastewater

..... SONG Jiayu, ZHANG Tingting, LI Lijun, LI Dandan, LI Xingchun, LI Yunzhao (943)

Experimental Study on Remediation of Petroleum Hydrocarbon Pollution in Subsurface Aquifers Based on SEAR

Technology YANG Siyue, SUN Yaqiao, MAO Ming, WANG Jie, ZHU Huan, LIU Hongwei, YANG Shengke (954)

Preparation and Study of Catalytic Properties of Mo Doped FeS₂ Heterogeneous Fenton Catalysts

..... YANG Jingwen, FANG Xiaofeng, YANG Bo (965)

Ecological Environment

- Effects of Submerged Macrophytes on Phosphorus Transport between Overlying Water and Sediment in the Growth Period under Static and Flowing Conditions LIU Zijian, LI Weiming, ZHANG Xutong, ZHANG Kun, CHEN Shengsheng, XIONG Weiwei (975)
- Influencing Mechanisms of Dual Fluctuations of Water Level and Salinity on Nitrogen and Phosphorus Removal by Reed ZHENG Hanjie, WANG Zibo, ZHU Xiang, DU Peng, YU Jianghua, XIE Lei, PENG Fuquan, WANG Ling (986)

Soil and Solid Waste

- Preparation of Fe⁰-BC Using Wood Waste and Iron Sludge and Its Application for Removing Cr(VI) CHEN Chao, LIU Jianguo, ZHAO Guangqi, LIU Meijia, LI Li (995)
- Study on Barium Transformation and Environmental Risk during Oil-Based Drill Cuttings Incineration HUANG Xiang, PENG Xiaoxi, GUO Weiguang, HAN Yuqi, ZHANG Li, HOU Jiang, YONG Yi (1006)

Environmental Pollution and Health

- Research Progress on Environmental Exposure and Human Health Effects of Microplastics SUN Xiangying, ZHUANG Yin, WANG Yubang, XU Qiujiin, WANG Cheng (1020)
- Study on Spatial Distribution of Typical High-Selenium Soil and Content Characteristics and Main Sources of Selenium in Main Crops in Shaanxi Province HAO Litao, ZHANG Shixi, LUO Kunli (1032)

Environmental Economy and Management

- Influence of Sustainable Development Progress on Public Satisfaction of Ecological Civilization Construction in China LIU Yali, SHAN Liwen, DU Jianqing, WANG Yanfen (1042)
- Analysis and Suggestions of Environmental Risk Control Strategy for Tailings Ponds WANG Hongyang, WANG Xu, CHEN Haiyan, ZHAO Xiaoli, SHEN Yaqin, LIU Huifang, LI Huixian (1052)

