

万方知库
Eco-Environmental
Knowledge Web

ACTA SCIENTIAE CIRCUMSTANTIAE

环境科学学报

2021 Vol.41 No.7 第41卷 第7期



QK2126880



科学出版社
Science Press



中国科学院生态环境研究中心 主办



万方数据

目 次

减排措施与气象因子对 2013—2019 年中国大陆地区 PM_{2.5} 浓度变化的贡献 梅梅,徐大海,朱蓉,等 (2519)

珠三角典型城市大气污染减排措施的 PM_{2.5} 改善评估研究 王毓铨,黄志炯,肖笑,等 (2530)

三亚城区 PM_{2.5} 中水溶性离子特征与来源分析 胡珊珊,吴晓晨,徐文帅,等 (2540)

黄渤海气溶胶光学厚度的多源卫星遥感产品精度分析和时空分布特征研究 毛颖,郑君亮,丘仲锋,等 (2550)

硫酸铵细粒子对苯二次有机气溶胶光学特性的影响 林昕,黄明强,张威,等 (2560)

莆田地区一次臭氧污染过程分析 林楠,蒋荣复,何宇晖,等 (2569)

铵盐在典型大气污染过程中的变化特征及来源分析 楼振纲,王在华,杨帆 (2577)

下垫面输入资料对深圳气象场及大气扩散能力模拟的影响 董宇童,陈丙寅,张兴腾,等 (2584)

正交与斜交旋转主成分分析法在气象因子影响细颗粒物研究中的应用 侯雪伟,吕鑫,魏蕾 (2598)

氧化锰与氧化铈协同等离子体催化氧化甲醇的活性差异研究 毛梦绮,王子琨,王雪青,等 (2607)

吸收协同高级氧化工艺处理低浓度含氰废气实验研究 张天昱,刘越,吴忠标 (2617)

基于船舶实时排放和烟羽在线监测的燃油硫含量识别方法研究 刘义铭,张艳,袁宇鹏,等 (2624)

基于电化学传感器的大气 NO₂ 与 O₃ 监测研究 路佳城,凌六一,董科学,等 (2633)

针对工作流量为 2 L·min⁻¹ 的切割器的捕集效率评价研究 刘佳琪,张国城,赵晓宁,等 (2640)

BP-1 生物降解群落结构解析及关键功能菌的降解效能评估 杨庆,黄开龙,孙浩浩,等 (2647)

异养硝化-好氧反硝化菌株的分离筛选及复配菌剂对河水的净化效果 汤默然,李茹莹 (2657)

磁性纳米 Fe₃O₄@C 对 SBR 脱氮除磷性能及其微生物种群组成的影响 刘琴,信欣,周希,等 (2664)

零价铁厌氧协同 MFC 强化降解吡啉性能与功能菌群分析 李培瑞,汪素芳,赵晓婵,等 (2673)

生物炭固定化硫酸盐还原菌对 Cd²⁺ 吸附及作用机制分析 朱晓丽,寇志健,王军强,等 (2682)

稻草秸秆生物质炭对重金属 Cd²⁺ 的吸附性能研究 王晓霞,杨涛,肖璐睿,等 (2691)

工业固废基地聚合物的制备及其吸附 Pb(II) 的性能 王超,宋卫锋,杨佐毅,等 (2700)

老化微塑料对水体中重金属铜和锌的吸附行为研究 王琼杰,张勇,张阳阳,等 (2712)

不同水化学因素对砷在河砂上的吸附影响研究 陈辉,单慧媚,彭三曦,等 (2727)

Ac-Co/Uio-66 对水中阴离子染料的吸附性能 莫静宇,向平,李梦颖,等 (2740)

Al₃ 改性羟基磷灰石的除氟性能研究 童庆,徐慧,樊华,等 (2748)

BiOCl/TiO₂ 的氯化改性及其新式光生自由基催化反应 王磊,韩浩,朱凌甫,等 (2758)

铁改性掺氮碳纤维活化过一硫酸盐降解双酚 A 肖彤,马捷,王雁,等 (2766)

硼-氮共掺杂中空碳纳米纤维的制备及其活化过一硫酸盐降解双酚 A 的性能研究 姚怡媛,王超海,晏鑫,等 (2774)

硫氮共掺杂碳基材料活化过一硫酸盐降解 2,4-二氯苯酚的效能及机理 杨成海,宁寻安,赖晓君,等 (2785)

Bi-FeC₂O₄ 复合催化剂活化过硫酸盐降解罗丹明 B 黎素,张博,谢春生,等 (2796)

硝酸盐废水的连续流电催化脱氮研究 孙拓,李一兵,张汝山,等 (2806)

鄱阳湖湿地 DOM 对铁还原菌异化还原水铁矿的影响 舒瑶,弓晓峰,李远航,等 (2814)

围垦养殖对中国典型滨海湿地土壤真菌多样性及群落结构影响 周雅心,林少颖,郑毅,等 (2826)

粤北山区连州市土壤硒含量分布特征及影响因素研究 陈东平,张金鹏,袁合飞,等 (2838)

土壤垂向异质性及离子强度对全氟辛酸在饱和农田土壤中迁移行为的影响 吕雪艳,孙媛媛,吴吉春 (2849)

非均性多孔介质中生物炭胶体的迁移行为研究 李文超,马闪闪,李选王,等 (2857)

柠檬酸对污染棕壤中镉的去除优化及结合形态影响 杨帅,李远,涂晨,等 (2868)

残留药剂对土壤 As、Hg、Cd、Pb 浸出测试干扰及消除方法 庞景理,和丽萍,杨远强,等 (2877)

黄河流域农业生产活性氮排放的时空特征研究 翟元晓,崔胜辉,高兵,等 (2886)

辽宁省畜禽养殖业抗生素排放特征及减排路径分析 陈小桐,安静,杨合,等 (2896)

4-氯-3-甲基苯酚(PCMC)暴露对成年斑马鱼内源性物质的影响 张梦妍,王乐蝶,艾连峰,等 (2905)

2,4-二叔丁基苯酚对斑马鱼早期发育阶段的神经毒性 刘旺,梁雪芳,李霞,等 (2913)

北京市污水处理厂出水中药物和个人护理品的季节变化及其生态风险评价 王龙,朱丹,曹云霄,等 (2922)

基于多目标优化的低影响开发设施布局方法 董新宇,张静慧,袁鹏,等 (2933)

基于小波分解及遗传 BPNN 耦合模型的地表水 As 浓度预测研究 王梓璇,王圃,王颖,等 (2942)

人口迁移视角下城镇化对典型领域碳排放驱动效应研究——以辽宁省为例 王泳璇,朱娜,李锋,等 (2951)

CONTENTS

Contributions of emission reduction measures and meteorological factors to the changes in PM _{2.5} concentration over mainland China from 2013 to 2019	MEI Mei, XU Dahai, ZHU Rong, et al (2519)
Evaluation of PM _{2.5} improvements from local control measures in typical cities of the Pearl River Delta	WANG Yuzheng, HUANG Zhijiong, XIAO Xiao, et al (2530)
Characteristics and source analysis of water-soluble ions in PM _{2.5} in Sanya	HU Shanhu, WU Xiaochen, XU Wenshuai, et al (2540)
Precision analysis and spatiotemporal distribution characteristics from multi-source satellite aerosol optical depth data in the Yellow Sea and Bohai Sea	MAO Ying, ZHENG Junliang, QIU Zhongfeng, et al (2550)
Effects of ammonium sulfate fine particle on the optical properties of benzene secondary organic aerosol	LIN Xin, HUANG Mingqiang, ZHANG Wei, et al (2560)
A case study of ozone pollution in Putian	LIN Nan, JIANG Rongfu, HE Yuhui, et al (2569)
Variation characteristics and source analysis of ammonium salt in typical air pollution processes	LOU Zhengang, WANG Zaihua, YANG Fan (2577)
The influence of underlying surface input data on the simulation of meteorological field and atmospheric diffusion capacity in Shenzhen	DONG Yutong, CHEN Bingyin, ZHANG Xingteng, et al (2584)
Application of orthogonal and oblique rotation principal component analysis in the influence of meteorological factors on fine particles	HOU Xuwei, LU Xin, WEI Lei (2598)
Exploration on the difference in performance of manganese oxide and cerium oxide in synergistic plasma-catalytic oxidation of methanol	MAO Mengqi, WANG Zikun, WANG Xueqing, et al (2607)
Experimental study on the treatment of low-concentration cyanide-containing waste gas by adsorption coupled with advanced oxidation process	ZHANG Tianyu, LIU Yue, WU Zhongbiao (2617)
Identification of sulfur content in marine fuel oil based on real-time ship emissions and online monitoring of plumes	LIU Yiming, ZHANG Yan, YUAN Yupeng, et al (2624)
Monitoring of atmospheric NO ₂ and O ₃ based on electrochemical sensor	LU Jiacheng, LING Liuyi, DONG Kexue, et al (2633)
Efficiency evaluation of cutters with working flow of 2 L·min ⁻¹	LIU Jiaqi, ZHANG Guocheng, ZHAO Xiaoning, et al (2640)
Analysis of BP-1 biodegradation community structure and evaluation of degradation efficiency of the key functional bacteria	YANG Qing, HUANG Kailong, SUN Haohao, et al (2647)
Isolation of heterotrophic nitrification-aerobic denitrification bacteria strains and purification of river water by mixed cultures	TANG Moran, LI Ruying (2657)
Effects of Fe ₃ O ₄ @C nanoparticles on nitrogen and phosphorus removal performance and microbial community in a sequencing batch reactor	LIU Qin, XIN Xin, ZHOU Xi, et al (2664)
The performance and functional microbial community analysis in a combination system of zero-valent iron pre-anaerobic treatment and MFC for strengthening the degradation of indole	LI Peirui, WANG Sufang, ZHAO Xiaochan, et al (2673)
Adsorption of Cd ²⁺ by sulfate reducing bacteria immobilized biochar	ZHU Xiaoli, KOU Zhijian, WANG Junqiang, et al (2682)
Study on the adsorption performance of rice straw biomass charcoal to heavy metal Cd ²⁺	WANG Xiaoxia, YANG Tao, XIAO Lurui, et al (2691)
Synthesis of industrial wastes-based geopolymer and its adsorption capacity for Pb(II)	WANG Chao, SONG Weifeng, YANG Zuoyi, et al (2700)
Adsorption of heavy metal ions Cu ²⁺ and Zn ²⁺ onto UV-aged microplastics in aquatic system	WANG Qiongjie, ZHANG Yong, ZHANG Yangyang, et al (2712)
Hydrochemical influences on arsenic adsorption by river sand	CHEN Hui, SHAN Huimei, PENG Sanxi, et al (2727)
Performance of Ac-Co/UiO-66 on adsorption of anionic dyes in aqueous solution	MO Jingyu, XIANG Ping, LI Mengying, et al (2740)
Study on the fluoride removal performance of Al ₁₃ modified hydroxyapatite	TONG Qing, XU Hui, FAN Hua, et al (2748)
The new free radical reaction of chlorinated BiOCl/TiO ₂	WANG Lei, HAN Hao, ZHU Lingfu, et al (2758)
Degradation of bisphenol A by activation of peroxymonosulfate by Fe modified N-doped carbon fiber	XIAO Tong, MA Jie, WANG Yan, et al (2766)
The fabrication of B-N co-doping hollow carbon nanofibers and peroxymonosulfate activation for the degradation of bisphenol A	YAO Yiyuan, WANG Chaohai, YAN Xin, et al (2774)
Degradation efficiency and mechanism of 2, 4-dichlorophenol by activation of peroxymonosulfate with sulfur and nitrogen co-doped carbocatalysts	YANG Chenghai, NING Xun'an, LAI Xiaojun, et al (2785)
Catalytic degradation of Rhodamine B by Bi-FeC ₂ O ₄ composite activated persulfate	LI Su, ZHANG Bo, XIE Chunsheng, et al (2796)
Continuous electrocatalytic denitrification of nitrate wastewater	SUN Tuo, LI Yibing, ZHANG Rushan, et al (2806)
Effect of DOM on dissimilatory reduction of ferrihydrite by iron reducing bacteria in Poyang Lake Wetland	SHU Yao, GONG Xiaofeng, LI Yuanhang, et al (2814)
Effects of reclamation aquaculture on soil fungi diversity and community structure of typical coastal wetlands in China	ZHOU Yaxin, LIN Shaoying, ZHENG Yi, et al (2826)
Selenium distribution in soils of Lianzhou city, mountain area of northern Guangdong Province and its influencing factors	CHEN Dongping, ZHANG Jinpeng, NIE Hefei, et al (2838)
Perfluorooctanoic acid transport in saturated farmland soil: Effects of vertical heterogeneity of soil properties and ionic strength	LU Xuayan, SUN Yuanyuan, WU Jichun (2849)
The migration behaviors of biochar colloids in heterogeneous porous media	LI Wenchao, MA Shanshan, LI Xuanwang, et al (2857)
Optimization of cadmium removal from and speciation in contaminated brown soil using citric acid	YANG Shuai, LI Yuan, TU Chen, et al (2868)
Interference of residual stabilization agents with leaching test of As, Hg, Cd, Pb contaminated soil and a solution	PANG Jingli, HE Liping, YANG Yuanqiang, et al (2877)
Spatio-temporal characteristics of reactive nitrogen emission from agricultural production in the Yellow River Basin	ZHAI Yuanxiao, CUI Shenghui, GAO Bing, et al (2886)
Analysis of antibiotics emission characteristics and reduction path of livestock and poultry industry in Liaoning Province	CHEN Xiaotong, AN Jing, YANG He, et al (2896)
The effect of 4-chloro-3-methylphenol (PCMC) on endogenous substances in adult zebrafish (<i>Danio rerio</i>)	ZHANG Mengyan, WANG Lerong, AI Lianfeng, et al (2905)
Neurotoxicity of 2,4-di-tert-butylphenol on the early-staged zebrafish	LIU Wang, LIANG Xuefang, LI Xia, et al (2913)
Seasonal changes and ecological risk assessment of pharmaceutical and personal care products in the effluents of wastewater treatment plants in Beijing	WANG Long, ZHU Dan, CAO Yunxiao, et al (2922)
Low impact development practices layout method based on multi-objective optimization	DONG Xinyu, ZHANG Jinghui, YUAN Peng, et al (2933)
Wavelet decomposition and genetic BPNN hybrid model based modelling approach for As concentration prediction in surface water	WANG Zixuan, WANG Pu, WANG Ying, et al (2942)
Research on the driving effect of urbanization on carbon emission in typical fields from the perspective of population migration-Taking Liaoning Province as an example	WANG Yongxuan, ZHU Na, LI Feng, et al (2951)

《环境科学学报》第六届编委会名单

主 编：曲久辉

副 主 编：刘文清 杨志峰 彭永臻 袁志国 俞汉青 朱 彤 毕 军
王书肖

学术顾问：汤鸿霄 郝吉明 陶 澍 江桂斌 傅伯杰 赵进才 贺克斌
张远航 彭平安

编 委：(按姓氏笔画排)

马 军	王书肖	王金南	王学军	王建龙	王晓昌	王爱杰
文湘华	尹大强	毕 军	曲久辉	朱 彤	朱利中	全 燮
刘 永	刘文清	刘会娟	麦碧娴	杨 敏	杨志峰	吴丰昌
何品晶	余 刚	张利田	陈同斌	欧阳志云	周启星	郑 华
郑君瑜	郑明辉	胡 春	胡勇有	俞汉青	袁志国	贾晓珊
黄 霞	崔宝山	彭永臻	潘 纲			

编辑部主任：杨桂华

责任编辑：卜庆杰 王 虎

环 境 科 学 学 报

(Huanjing Kexue Xuebao)

(月刊,1981年创刊)

2021年7月 第41卷 第7期

ACTA SCIENTIAE CIRCUMSTANTIAE

(Monthly, Started in 1981)

Vol.41, No.7, July 2021

主 管 中国科学院
主 办 中国科学院生态环境研究中心
编 辑 《环境科学学报》编辑部
北京 2871 信箱 邮政编码 100085
电话:(010)62941073
E-mail:hjkxxb@cees.ac.cn
网址:www.actasc.cn
主 编 曲 久 辉
出 版 科 学 出 版 社
北京东黄城根北街 16 号
(邮政编码 100717)
印刷装订 北京宝昌彩色印刷有限公司
发 行 处 科学出版社
电话:010-64017032,64017539
国外总发行 中国国际图书贸易总公司
(北京 399 信箱,100044)
出 版 日 期 每月 26 日

Supervised by Chinese Academy of Sciences
Sponsored by Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences
Edited by the Editorial Office of Acta Scientiae Circumstantiae
(P.O.Box 2871, Beijing 100085, China)
Editor-in-Chief Qu Jiuhui
Published by Science Press(16 Donghuangchenggen North Street Beijing 100717, China)
Printed by Beijing Baochang Color Printing Co.Ltd, China
Distributed by Science Press Tel:010-64034563, E-mail:journal@cspg.net
International distributed by China International Book Trading Corporation (Guoji Shudian)
(P.O.Box 399, Beijing 100044, China)
Published on 26th per Month

中国标准刊号: ISSN 0253-2468
CN 11-1843/X

CODEN: HKXUDL

国内邮发代号: 82-625

国外发行代号: M410

订购处: 全国各地邮政局

定价: 160.00 元

网上购买请扫以下二维码



ISSN 0253-2468

