

目 次

强化 3 级 Fenton 氧化结合石灰乳中和混凝处理苯系染料中间体废水	郭莹, 陈鸿汉, 张焕祯, 王宁, 常思淼, 庞浩, 王晖 (5785)
光诱导腐殖酸产生自由基对天然水中雌二醇光降解效能的影响	孙昊婉, 张立秋, 封莉 (5794)
AMBR-MABR 植合工艺处理模拟畜禽养殖废水的启动和运行	赵丽, 王毅力 (5799)
UV/H ₂ O ₂ 降解水中磺胺嘧啶影响因素及机理	苟奎莹, 张盼月, 钱锋, 王培良, 赵春晓, 宋永会 (5810)
活性炭催化臭氧氧化深度处理工艺对酵母发酵废水中有机物的去除特性分析	汪毅, 赵冬霞, 封莉, 程翔, 张立秋 (5820)
高效垂直流人工湿地 + 多级生态塘深度处理污水厂尾水	段田莉, 成功, 郑媛媛, 罗思义 (5828)
不同泥龄对活性污泥絮凝特性的影响	詹咏, 张焕焕, 冯青青, 刘明昊, 董滨, 何群彪 (5836)
三卤甲烷和卤乙腈类消毒副产物在 14 个饮用水厂出水中的浓度水平及原水氯化/氯胺化中的生成势	宝露尔, 张海峰, 杨敏 (5843)
同步化学除磷对 A ² /O 工艺除污染效能与活性污泥性能的影响	马秋莹, 刘旭林, 封莉, 张立秋 (5848)
管道特征对给水管网中锰释放的影响	丁元勋, 李贵伟, 马徐, 徐洪福, 金俊伟, 石宝友 (5856)
多硫化合物还原 Cr(Ⅵ) 的动力学及其影响因素	郭彩阳, 石美, 张良, 刘晓丹, 李娟, 李俊, 邢兴, 郑建中 (5863)
实时控制序批式膜生物反应器处理养猪废水的短程硝化	姜超, 隋倩雯, 陈梅雪, 郁达伟, 张俊亚, 柴玉峰, 柳蒙蒙, 陈彦霖, 魏源送 (5868)
改良 Fenton 工艺用于化工园区污水深度处理的小试	张丽丽, 黄思远, 石艳玲, 唐琪玮, 强璐 (5877)
厌氧动态膜生物反应器处理冷轧平整液废水	张骏尧, 王志伟, 梅晓洁, 吴志超 (5884)
Fe ⁰ 类芬顿法深度处理制药废水	黄挺, 张光明, 张楠, 种珊, 刘毓璨, 朱佳 (5892)
含 17 β -雌二醇饮用水氯化消毒前后水质生物毒性的变化	孙凯, 马世沅, 李史智, 张立秋 (5897)
Cu-CuO-MnO ₂ 核壳催化剂的制备及其催化降解亚甲基蓝的性能	王莉, 张建红, 韩永军, 田刚, 冯云晓, 李青彬, 尚朝辉 (5903)
活性污泥和生物膜复合模型的建立与模拟	徐涛, 彭党聪, 徐天凯, 武少华, 金虎 (5909)
厌氧反硝化生物反应器恢复启动过程中微生物群落特征分析	晋超, 王敦球, 苗时雨, 兰华春, 刘锐平 (5917)
生物法去除厌氧发酵所产沼气中的 H ₂ S	王智鹏, 桑义敏, 徐超, 韩严和 (5923)
脉冲放电协同 Ag 改性 Mn-TiO ₂ /分子筛催化剂去除甲醛	董冰岩, 谢寅寅, 孙宇, 江小华, 王晖 (5930)
电袋复合除尘器协同脱除 Hg 及 SO ₃	陈奎续 (5937)
铁碳材料还原 NO 络合吸收体系中 Fe(Ⅲ)-EDTA 的性能	张颖, 黄妍, 李元元, 唐南, 张俊丰, 杨柳春 (5943)
湍流与化学团聚耦合促进燃煤细颗粒物的清除	于洋, 孙德帅, 颜培玲, 申贤坤 (5949)
大型袋式除尘器风量风压的 LQR 最优控制	刘亚南, 张琨, 张磊, 谭志洪, 刘丽冰 (5956)
煤堆内 CO 浓度分布与变化规律的数值模拟	刘尹霞, 马恒, 董子文 (5963)
车用柴油机燃用生物柴油的排放特性	陈韬, 谢辉, 吴志新, 杨平龙, 王维 (5972)
2015 年南京市 PM _{2.5} 与 PM ₁₀ 的污染特征	王涛, 何浩奇, 夏忠欢, 吴敏敏, 张倩倩 (5978)
旋风-滤袋复合除尘器的数值模拟分析	刘伟冬, 李勇 (5986)

石家庄市土壤扬尘排放量估算及分布特征	李媚, 倪爽英, 雷永从, 陆雅静, 鲍晓磊 (5993)
餐厨垃圾分选有机废物热解动力学特性分析	黄博, 张傑, 常风民, 张笑千, SEGUN Giwa Abdulmoseen, 张言超, 王凯军 (6000)
酸化相发酵类型对甲烷相产甲烷性能的影响	陈雪, 李秀金, 张文海, 张立东, 朱海燕, 刘研萍, 袁海荣, 庞云芝, 浦鹏 (6007)
猪粪与污泥不同配比对其厌氧共消化与微生物多样性的影响	ALOUN Manosane, 杨朝晖, 徐锐, 李娟, 张益杰, 周焱, 王庆鹏, 柏洋 (6014)
城市干污泥热解气化	庞贊信, 王宏东, 陈义胜, 曹放, 刘素霞, 何丽娟 (6022)
磷酸盐缓冲液初始 pH 值对高含固污泥厌氧消化性能影响	张冬凌, 黄晓婷, 袁海平, 楼紫阳, 朱南文 (6028)
湿热预处理对北京市典型餐厨垃圾生物制氢潜力的影响	贾璇, 王勇, 任连海, 李彤, 李迎新, 赵敏 (6034)
基于响应曲面法优化生物质污泥活性炭的制备方法	刘宇程, 刘骞, 陈菊, 吕忠祥, 汤历平, 石艳 (6041)
响应面法优化超临界 CO ₂ 流体处理油基钻屑工艺	位华, 何焕杰, 张弋 (6050)
污水污泥流化床空气气化焦油的燃烧特性	秦梓雅, 解立平, 王云峰, 杜金山, 邢京生 (6056)
高固液比下废旧锌锰电池生物淋沥的特性及机理	牛志睿, 喻伟东, 冯美宁, 张立, 祁乙浩, 史宁, 刘强 (6063)
微波作用下氧化碱浸铜冶炼烟灰脱砷的动力学	王倩, 郭莉, 吴晨捷, 杜冬云 (6072)
包装垃圾添加脱氯半焦制备 SRF 的燃烧特性及动力学分析	刘珍, 王汉青, 周跃云, 刘建文, 张晓东 (6078)
联合 NaOH 和 Ca(OH) ₂ 强化剩余污泥厌氧发酵生产挥发性脂肪酸	于嵘, 步秀芹, 苏相琴, 郭诗琪, 廖洁 (6087)
TG-FTIR 研究生物质成型燃料热解与燃烧特性	林顺洪, 李伟, 柏继松, 吕全伟, 李长江, 江辽, 徐明 (6092)
火电厂协同资源化处理城市污泥二次污染控制	李勇辉, 王群英, 赵晓明, 陈仕国, 宋明光, 曹闯, 刘芝俊, 郝长军, 张浩, 张霖 (6098)
洗涤方式对电解锰渣中锰回收效率及无害化处理的影响	赵博超, 王雪婷, 朱克松, 范喜男, 窦广玉, 潘涔轩 (6103)
响应曲面优化柏木屑微波活性炭的制备及其吸附 AR88 性能	王鹏辰, 莫娟, 谢汝桢, 蒋文举 (6109)
含油污泥热化学清洗剂的研制与清洗效果实验分析	梁宏宝, 刘福生, 陈博, 李涛 (6117)
基于碱液预处理的泡沫浮选法分离 PVC/PET	扶娟, 赵钺, 刘珺, 徐开伟, 李彦鹏 (6124)
复合胶凝剂和废玻璃钢纤维改性半水脱硫石膏	陈蜜蜜, 樊铁林, 赵风清 (6130)
化工污泥焚烧灰渣基功能材料中 Cr 的溶出	刘志英, 徐学骁, 刘杨, 康治金, 曹洁, 徐炎华 (6137)
生态堆技术修复老化油泥污染土壤	张强, 傅晓文, 季蕾, 祁志冲, 王加宁 (6142)
比较两种表面活性剂淋洗去除土壤中的重金属	丁宁, 徐贝妮, 彭灿, 吴然, 张梦瑶, 周静 (6147)
陕北石油污染对土壤球囊霉素含量的影响	山宝琴, 李茜, 杨燕 (6155)
铬污染土壤的还原稳定化修复	张辉, 付融冰, 郭小品, 宋召凤, 陈小华 (6163)
施粪肥土壤中抗生素的提取条件优化及残留特征	曹胜男, 梁玉婷, 易良银, 裴孟, 王丹丹, 杨泽平, 赵远, 涂保华 (6169)
生物炭基固定化菌剂对石油类污染物的高效降解	任宏洋, 马伶俐, 王兵, 袁增, 李珍珍, 丁梦娇 (6177)
阳极 pH 对 Fe(Ⅲ) 强化阴极电动修复 Pb 污染土壤的影响	任文涛, 祝方, 张婧, 罗彦, 刘涛 (6184)
小尺度农田土壤 Pb、Zn 和 Cd 空间分布及污染评价——以云南沘江沿岸某农田为例	金修齐, 王朋, 郭秉林, 郭进, 周丹丹 (6190)
沉积物中溶解性有机质的垂直分布光谱特性	翟天恩, 霍守亮, 张靖天 (6196)
不同堆肥对南方屋顶绿化植物生长特性的影响	殷庆霏, 郭建斌, 倪肖卫, 黄娟, 蔡飞 (6205)
2012—2016 年《环境工程学报》高发文作者 TOP50	(6214)
2012—2016 年《环境工程学报》高被引论文 TOP50	(6215)
2012—2016 年《环境工程学报》高发文机构 TOP50	(6216)

CONTENTS

Treatment of benzene series dye intermediate wastewater by enhanced three-staged Fenton oxidation combined with lime milk neutralization coagulation	GUO Ying, CHEN Honghan, ZHANG Huanzhen, WANG Ning, CHANG Simiao, PANG Hao, WANG Hui(5785)
Influence of free radicals produced by photo-induced humic acid on photodegradation of 17β-estradiol in natural water	SUN Haowan, ZHANG Liqiu, FENG Li(5794)
Start-up and operation of anaerobic migrating blanket reactor-membrane biofilm bioreactor (AMBR-MABR) coupling process treating synthetic livestock wastewater	ZHAO Li, WANG Yili(5799)
Influencing factors and mechanism of sulfadiazine degradation by UV/H₂O₂	GOU Xiying, ZHANG Panyue, QIAN Feng, WANG Peiliang, ZHAO Chunxiao, SONG Yonghui(5810)
Analyses on removal characteristics of organic compounds during activated carbon catalytic ozonation process treating yeast fermentation wastewater	WANG Yi, ZHAO Dongxia, FENG Li, CHENG Xiang, ZHANG Liqiu(5820)
Advanced treatment of tail water from sewage plant by high-efficiency vertical flow constructed wetland-multistage ecological ponds	DUAN Tianli, CHENG Gong, ZHENG Yuanyuan, LUO Siyi(5828)
Effects of SRT on activated sludge bioflocculation	ZHAN Yong, ZHANG Huanhuan, FENG Qingqing, LIU Minghao, DONG Bin, HE Qunbiao(5836)
Occurrence of trihalomethanes and haloacetonitriles in finished drinking water from 14 drinking water treatment plants and their formation potential during chlorination and chloramination	BAO Luer, ZHANG Haifeng, YANG Min(5843)
Effect of simultaneous chemical phosphorus removal on contaminant removal efficiency and activated sludge characteristics in A²/O process	MA Qiuying, LIU Xulin, FENG Li, ZHANG Liqiu(5848)
Influence of pipe characteristics on manganese release in drinking water distribution system	DING Yuanxun, LI Guiwei, MA Xu, XU Hongfu, JIN Junwei, SHI Baoyou(5856)
Kinetics of Cr(VI) reduction by polysulfide and its influential factors	GUO Caiyang, SHI Mei, ZHANG Liang, LIU Xiaodan, LI Juan, LI Jiao, XING Xing, ZHENG Jianzhong(5863)
Shortcut nitrification in a pilot-scale real-time control sequencing batch membrane bioreactor treating swine wastewater	JIANG Chao, SUI Qianwen, CHEN Meixue, YU Dawei, ZHANG Junya, CHAI Yufeng, LIU Mengmeng, CHEN Yanlin, WEI Yuansong(5868)
Lab-scale test on advanced treatment of chemical industrial wastewater using an improved Fenton process	ZHANG Lili, HUANG Siyuan, SHI Yanling, TANG Qiwei, QIANG Lu(5877)
Treatment of cold-rolling wastewater from iron and steel industry using an anaerobic dynamic membrane bioreactor	ZHANG Junyao, WANG Zhiwei, MEI Xiaojie, WU Zhichao(5884)
Pharmaceutical wastewater advanced treatment by Fe⁰ Fenton-like process	HUANG Ting, ZHANG Guangming, ZHANG Nan, CHONG Shan, LIU Yucan, ZHU Jia(5892)
Variations of potential biological toxicity of drinking water containing 17β-estradiol before and after chlorine disinfection	SUN Kai, MA Shiyuan, LI Shizhi, ZHANG Liqiu(5897)
Preparation of core-shell structure Cu-CuO-MnO₂ catalysts and their performance of catalytic degradation of methylene blue	WANG Li, ZHANG Jianhong, HAN Yongjun, TIAN Gang, FENG Yunxiao, LI Qingbin, SHANG Zhaohui(5903)
Integrated fixed film activated sludge modeling and simulation	XU Tao, PENG Dangcong, XU Tianskai, WU Shaohua, JIN Hu(5909)
Analysis of the microbial community characteristics during re-startup of USB anaerobic denitrification reactor	JIN Chao, WANG Dunqiu, MIAO Shiyu, LAN Huachun, LIU Ruiping(5917)
Hydrogen sulfide removal from biogas in anaerobic fermentation by use of biological process	WANG Zhipeng, SANG Yimin, XU Chao, HAN Yanhe(5923)
Degradation of formaldehyde by pulsed discharging plasma combined with Ag-modified Mn/TiO₂-molecular sieve catalyst	DONG Bingyan, XIE Yinyin, SUN Yu, JIANG Xiaohua, WANG Hui(5930)
Removal of mercury and sulfur trioxide by electrostatic-fabric integrated precipitator	CHEN Kuixu(5937)
Performance of Fe(III)-EDTA reduction with Fe/AC in NO complex absorption system	ZHANG Ying, HUANG Yan, LI Yuanyuan, TANG Nan, ZHANG Junfeng, YANG Liuchun(5943)
Removal of fine particles with coupling of turbulent and chemical agglomeration	YU Yang, SUN Deshuai, YAN Peiling, SHEN Xiankun(5949)
LQR optimal control of air volume and air pressure of large bag filter	LIU Yanan, ZHANG Kun, ZHANG Lei, TAN Zhihong, LIU Libing(5956)
Numerical simulation of concentration distribution and variation rule of CO in coal stockpile	LIU Yinxia, MA Heng, DONG Ziwen(5963)
Emission properties of diesel engine fueled with biodiesel	CHEN Tao, XIE Hui, WU Zhixin, YANG Pinglong, WANG Wei(5972)
Pollution characteristics of PM_{2.5} and PM₁₀ in 2015 in Nanjing, China	WANG Tao, HE Haoqi, XIA Zhonghuan, WU Minmin, ZHANG Qianqian(5978)
Numerical simulation analysis of cyclone-bag composite filters	LIU Weidong, LI Yong(5986)
Estimation and spatial distribution characteristics of soil dust emissions in Shijiazhuang	LI Mei, NI Shuangying, LEI Yongcong, LU Yajing, BAO Xiaolei(5993)
Pyrolysis kinetics analysis of the organic waste sorted from food waste	HUANG Bo, ZHANG Jie, CHANG Fengmin, ZHANG Xiaoqian, SEGUN Giwa Abdulmoseen, ZHANG Yanchao, WANG Kaijun(6000)

Effects of fermentation type of acidogenic phase on biomethane yield of methanogenic phase	..... CHEN Xue, LI Xiujin, ZHANG Wenhai, ZHANG Lidong, ZHU Haiyan, LIU Yanping, YUAN Hairong, PANG Yunzhi, PU Peng (6007)
Impacts of different mix ratio of pig manure and dewatered sludge on anaerobic digestion performance and microbial community diversity	..... ALOUN Manosane, YANG Zhaojun, XU Rui, LI Juan, ZHANG Yijie, ZHOU Yan, WANG Qingpeng, BAI Yang (6014)
Pyrolysis and Gasification of Municipal Dry Sludge	..... PANG Yunji, WANG Hongdong, CHEN Yisheng, CAO Fang, LIU Suxia, HE Lijuan (6022)
Effect of phosphate buffer solution with different initial pH on anaerobic digestion of high-solid sludge	..... ZHANG Dongling, HUANG Xiaoting, YUAN Haiping, LOU Ziyang, ZHU Nanwen (6028)
Impact of hydrothermal pre-treatment from typical kitchen waste in Beijing on biohydrogen production potential	..... JIA Xuan, WANG Yong, REN Lianhai, LI Tong, LI Yingxin, ZHAO Min (6034)
Preparation method of biological sludge activated carbon based on response surface methodology	..... LIU Yucheng, LIU Qian, CHEN Ju, LYU Zhongxiang, TANG Liping, SHI Yan (6041)
Optimization of oil based drilling cuttings treatment process by supercritical CO₂ fluid using response surface methodology	..... WEI Hua, HE Huanjie, ZHANG Yi (6050)
Combustion properties of tars from air gasification of sewage sludge under fluidized bed	..... QIN Ziya, XIE Liping, WANG Yunfeng, DU Jinshan, PI Jingsheng (6056)
Features and mechanism of bioleaching spent Zn-Mn batteries at high pulp density	..... NIU Zhirui, YU Weidong, FENG Meining, ZHANG Li, QI Yihao, SHI Ning, LIU Qiang (6063)
Arsenic removal from copper smelting ash assisted by microwave induced oxidation process	..... WANG Qian, GUO Li, WU Chenjie, DU Dongyun (6072)
Combustion characteristics and kinetic analysis of solid recovered fuel making of package waste with dechlorinated char	..... LIU Zhen, WANG Hanqing, ZHOU Yueyun, LIU Jianwen, ZHANG Xiaodong (6078)
Enhanced volatile fatty acids production from waste activated sludge anaerobic fermentation using combined NaOH and Ca(OH)₂	..... YU Rong, BU Xiuqin, SU Xiangqin, GUO Shiqi, LIAO Jie (6087)
Pyrolysis and combustion characteristics of biomass briquette fuels by using TG-FTIR	..... LIN Shunhong, LI Wei, BAI Jisong, LYU Quanwei, LI Changjiang, JIANG Liao, XU Ming (6092)
Secondary pollution control of co-disposal system of municipal sludge in thermal power plant	..... LI Yonghui, WANG Qunying, ZHAO Xiaoming, CHEN Shigu, SONG Mingguang, CAO Chuang, LIU Zhijun, HAO Changjun, ZHANG Hao, ZHANG Ji (6098)
Effects of washing methods on recovery efficiency of manganese from manganese residue and harmless treatment	..... ZHAO Bochao, WANG Xueting, ZHU Kesong, YUAN Xinan, DOU Guangyu, PAN Cenxuan (6103)
Cypress sawdust based activated carbon preparation and its adsorptive capacity towards macromolecule dye (AR88): Optimization by surface methodology	..... WANG Pengchen, MO Juan, XIE Ruzhen, JIANG Wenju (6109)
Development of chemical cleaning agents of oily sludge and analysis of washing effect experiment	..... LIANG Hongbao, LIU Fusheng, CHEN Bo, LI Tao (6117)
Separation of PVC/PET by froth flotation with alkaline pretreatment	..... FU Juan, ZHAO Yue, LIU Jun, XU Kaiwei, LI Yanpeng (6124)
Modification on desulfurization gypsum by compound gelling agent and waste glass-reinforced plastic fiber	..... CHEN Mimi, FAN Tielin, ZHAO Fengqing (6130)
Dissolution of Cr in functional materials made by chemical sludge incineration ash	..... LIU Zhiying, XU Xuexiao, LIU Yang, KANG Zhijin, CAO Jie, XU Yanhua (6137)
Bioremediation of oil sludge contaminated soil by eco-pile	..... ZHANG Qiang, FU Xiaowen, JI Lei, QI Zhichong, WANG Jianing (6142)
Washing removal of heavy metals from different soils by two surfactants	..... DING Ning, XU Beini, PENG Can, WU Ran, ZHANG Mengyao, ZHOU Jing (6147)
Effect of petroleum contamination on concentration of glomalin in soil of Northern Shaanxi	..... SHAN Baoqin, LI Qian, YANG Yan (6155)
Experimental research on stabilization remediation of chromium contaminated soil	..... ZHANG Hui, FU Rongbing, GUO Xiaopin, SONG Zhao Feng, CHEN Xiaohua (6163)
Optimization of extraction conditions and residual characteristics of antibiotics in manure-amended soils	..... CAO Shengnan, LIANG Yuting, YI Liangyin, PEI Meng, WANG Dandan, YANG Zeping, ZHAO Yuan, TU Baohua (6169)
Efficient degradation of petroleum pollutant by immobilized bacteria based on biochar material	..... REN Hongyang, MA Lingli, WANG Bing, YUAN Zeng, LI Zhenzhen, DING Mengjiao (6177)
Effect of anolyte pH on remediation of Pb-contaminated soil by Fe (III) enhanced catholyte	..... REN Wentao, ZHU Fang, ZHANG Jing, LUO Yan, LIU Tao (6184)
Spatial distribution and pollution assessment of Pb, Zn and Cd in small scale farmland soil—A case study of a farmland along the Bijiang River in Yunnan Province	..... JIN Xiuqi, WANG Peng, GUO Binglin, GUO Jin, ZHOU Dandan (6190)
Spectral characteristics of vertical distribution of dissolved organic matters in sediments	..... ZHAI Tianan, HUO Shouliang, ZHANG Jingtian (6196)
Effects of different composts on growth characteristics of green roof plants in south China	..... YIN Qingfei, GUO Jianbin, NI Xiaowei, HUANG Juan, CAI Fei (6205)