



中国科技核心期刊
华东地区优秀期刊

2023

总第42卷

04

中国标准连. ISSN 1009-0177

续出版物号: CN 31-1513/TQ

邮发代码: 4-652

官方网址: www.jsjs1982.com

净水技术[®]

Water Purification Technology

自制二氧化钛电镜扫描

[大家之言]

任海静:

新时代发展要求下的城市供水排水科普工作

[封面文章]

碳基改性TiO₂去除水中典型污染物的试验

ISSN 1009-0177

主 管: 上海市科学技术协会

主 办: 上海市净水技术学会

上海城市水资源开发利用国家工程中心有限公司

学术支持: 上海市政工程设计研究总院(集团)有限公司

同济大学环境科学与工程学院



净水万事屋

净水技术

大家之言

- 新时代发展要求下的城市供水排水科普工作 任海静(01)

净水技术前沿与热点综述

- 基于源分离收集-分质净化-资源化利用的农村生活污水处理新模式 徐子斌(04)
农村生活污水研究热点及主题演进的可视化分析 梁文伯, 徐佳莹, 杨小丽, 等(14)
污水处理厂中的微塑料来源研究进展 韩伟朋, 杨 庆, 刘秀红, 等(23)
MOFs 基碳材料对水体中抗生素的吸附去除 程玉拓, 李博宇, 李 卓(31)
阳离子染料废水处理技术研究进展 刘 源, 张 娜, 刘 群, 等(39)

水源与饮用水保障

- 引江济太沿程小型过水湖泊典型重金属富集特征及潜在生态风险 过子怡, 盛根明, 冯君逸, 等(52)
典型河流的水质评价及影响因素分析:以深圳龙西河和丁山河为例 苏芬芬, 韩 帅, 顾嘉嘉, 等(62)
北方某市二次供水服务现状调查与影响因素分析 游晓旭, 李玉仙, 杨婷婷, 等(73)

污水处理与回用

- 不同电极下的等离子体放电特性及甲基橙处理影响 李淑敏, 黄邦斗, 王 齐, 等(79)
基于膜分离的铁盐除磷效果影响因素 郑雯佳, 孙继成, 王巧英, 等(86)
城市再生水年利用量预测分析 侯金甫, 方红远, 李艳明, 等(95)
高浓度啤酒废水作为污水脱氮除磷工艺补充碳源的应用及经济分析 徐 楠, 赵 静, 孙治富, 等(103)

工业水处理

- 液晶面板显影液废水中常见物质对 TMAH 厌氧降解的影响 曹依晴, 吕 娟, 董佳奇, 等(111)
碳基改性 TiO₂ 去除水中典型污染物的试验 王佳炜, 王国桥, 于 添, 等(121)
河北某钢铁企业冶金中水深度脱盐工程实践 邢秀敏, 金玉涛(130)

其他水系统研究与应用

- 污水干管失效风险评估和解决策略——广州市沥滘和西朗污水系统案例 袁 嶚, 霍广炼, 柯臻玮, 等(137)
厂网联排对某污水处理厂设计进水参数优化分析 吴伟龙, 杨中超, 李其宸, 等(144)
城市综合市政管网安全评价方法 宋 源, 刘世光, 戚宇瑶, 等(151)

城镇给排水工程设计案例专栏

- 多点进水多级 AO 工艺在寒冷地区大型污水处理厂的应用 叶 宁 (161)
西北某高浓度城市污水处理厂 SBR 工艺提标改造设计 景兆华, 王向举, 刘海茹, 等(169)
用地紧张给水厂深度处理工艺改造案例 蒋才芳 (176)

供排水企业运行及管理成果专栏

- 寒潮影响下城市供水管道设施防冻保温探讨 丁 炳, 张松松, 顾 宁, 等(181)
气浮与多种常规工艺联用对低温低浊水的处理效果分析 童佳佳, 张秋勉, 李 纲, 等(191)

WATER PURIFICATION TECHNOLOGY

CONTENTS

2023 No. 4 Vol. 42 Serial No. 260

SUMMIT FORUM

Science Popularization in Urban Water Supply and Drainage Industry under the Development Requirements of the New Era REN Haijing (01)

FRONTIER OF WATER PURIFICATION TECHNOLOGY AND HOTSPOT OVERVIEW

- New Mode for Rural Domestic Wastewater Treatment Based on Source-Separation-Collection, Separate Purification and Resource Utilization XU Zibin (04)
Visualization Analysis of Research Hotspots and Thematic Evolution for Rural Domestic Wastewater Treatment LIANG Wenbo, XU Jiaying, YANG Xiaoli, et al. (14)
Research Progress on the Sources of Microplastics in WWTPs HAN Weipeng, YANG Qing, LIU Xiuhong, et al. (23)
MOFs-Based Carbon Materials for Adsorption and Removal of Antibiotics in Water Body CHENG Yutuo, LI Boyu, LI Zhuo (31)
Review on Treatment Technology for Cationic Dyes Wastewater LIU Yuan, ZHANG Na, LIU Qun, et al. (39)

GUARANTEE FOR WATER SOURCES AND DRINKING WATER

- Enrichment Characteristics and Potential Ecological Risks of Typical Heavy Metals in Small River-Passing Lakes along the Water Diversion Project of Yangtze River to Taihu Lake GUO Ziyi, SHENG Genming, FENG Junyi, et al. (52)
Water Quality Evaluation and Influencing Factors Analysis of Typical Rivers: A Case Study of Longxi and Dingshan River in Shenzhen SU Fenfen, HAN Shuai, GU Jiajia, et al. (62)
Investigation of Secondary Water Supply Service Status and Analysis of Influencing Factors in a Northern City YOU Xiaoxu, LI Yuxian, YANG Tingting, et al. (73)

WASTEWATER TREATMENT AND REUSE

- Characteristics of Plasma Discharge under Different Electrodes and Treatment Effect on Methyl Orange Degradation LI Shumin, HUANG Bangdou, WANG Qi, et al. (79)
Influencing Factors of Ferric Salt for Phosphorus Removal Effect Based on Membrane Separation ZHENG Wenjia, SUN Jicheng, WANG Qiaoying, et al. (86)
Prediction Analysis of Annual Utilization of Urban Reclaimed Water HOU Jinfu, FANG Hongyuan, LI Yanming, et al. (95)
Application and Economic Analysis of High Concentration Brewery Wastewater as Additional Carbon Source in Wastewater Denitrification and Dephosphorization Process XU Nan, ZHAO Jing , SUN Zhifu, et al. (103)

INDUSTRIAL WATER TREATMENT

- Influence of Common Substances in Wastewater of LCD Panel Developer on Anaerobic Degradation of TMAH CAO Yiqing, LÜ Juan, DONG Jiaqi, et al. (111)
Experiment on Modified Carbon-Doped TiO₂ for Typical Pollutants Removal in Aqueous Solution WANG Jiawei, WANG Guojiao, YU Tian, et al. (121)
Engineering Practice of Deep Desalination for Metallurgical Reclaimed Water in an Iron and Steel Enterprise of Hebei XING Xiumin,JIN Yutao(130)

RESEARCH AND APPLICATION OF OTHER WATER SYSTEMS

- Failure Risk Assessment and Solution Strategy of Main Sewage Pipes—Cases of Lijiao and Xilang Sewage Systems in Guangzhou YUAN Rong, HUO Guanglian, KE Zhenwei, et al. (137)
Optimized Analysis of Influent Parameters Design of a WWTP under Combined Drainage System of Plant-Network WU Weilong, YANG Zhongchao, LI Qichen, et al. (144)
Safety Assessment and Analysis for Urban Municipal Pipeline Networks SONG Yuan, LIU Shiguang, QI Yuyao, et al. (151)

COLUMN OF DESIGN CASE OF WATER SUPPLY AND DRAINAGE ENGINEERING

- Application of Step-Feed Multi-Stage AO Process in Large WWTPs in Cold Region YE Ning(161)
Design of SBR Process for Upgrading and Reconstruction of an Urban WWTP with High Concentration Wastewater in Northwest China JING Zhaohua, WANG Xiangju, LIU Hairu, et al. (169)
Reconstruction Case of Advanced Treatment for a WTP with Limited Land Use JIANG Caifang(176)

ACHIEVEMENTS OF OPERATION AND MANAGEMENT PROGRESS OF WATER SUPPLY AND DRAINAGE ENTERPRISE

- Discussion on Antifreeze and Heat Preservation of Urban Water Supply Pipeline Facilities under the Influence of Cold Wave DING Wei, ZHANG Songsong, GU Ning, et al. (181)
Effect Analysis of Combined Air Flotation and Multiple Conventional Processes on Low Temperature and Low Turbidity Water Treatment TONG Jiajia, ZHANG Qiumian, LI Gang, et al. (191)