



中国科技核心期刊
华东地区优秀期刊

2022
总第41卷

12

中国标准连. ISSN 1009-0177
续出版物号: CN 31-1513/TQ

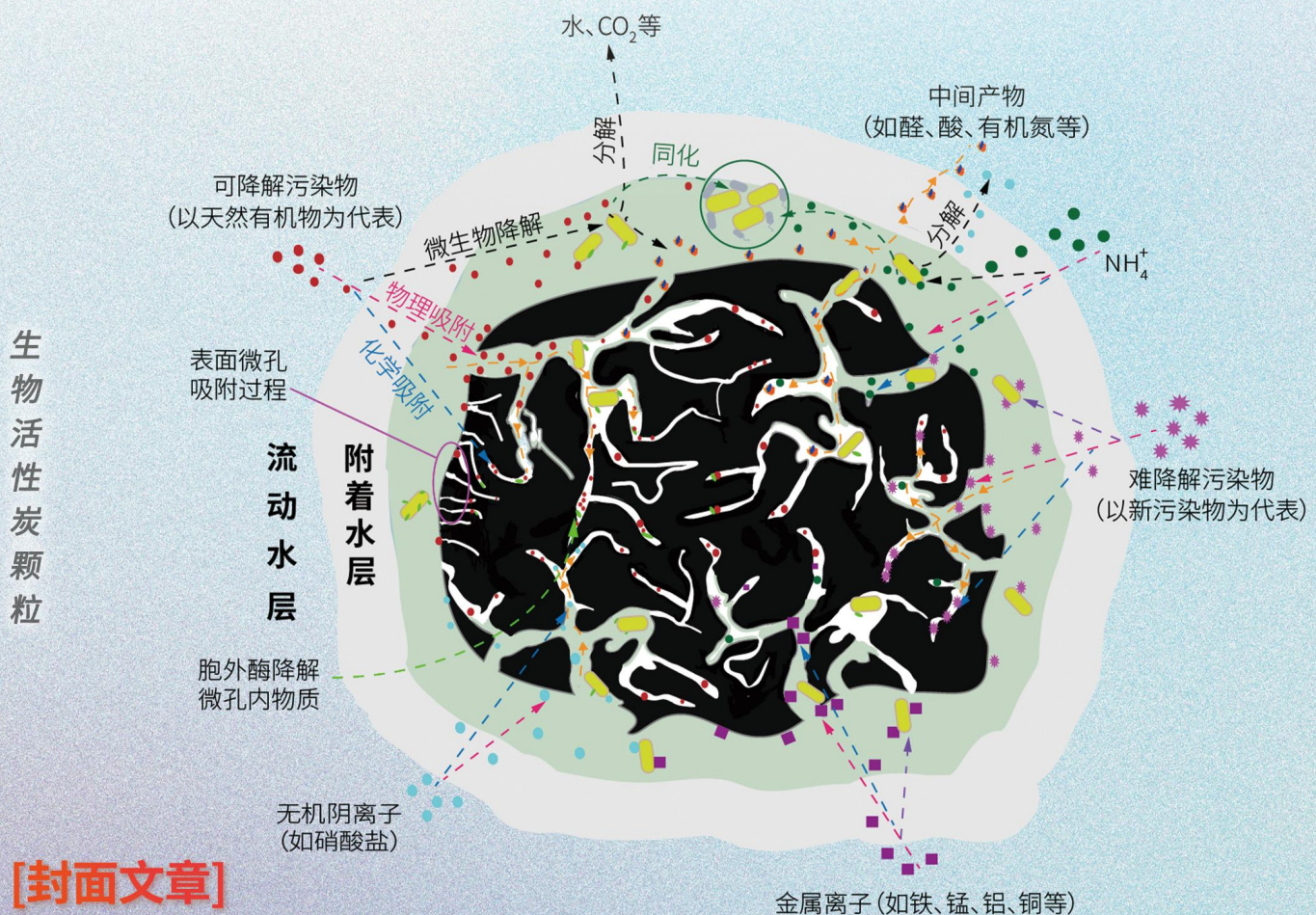
邮发代码: 4-652

投稿网址: zsjs.cbpt.cnki.net

净水技术®

Water Purification Technology

臭氧-生物活性炭工艺与饮用水安全



[封面文章]

水厂生物活性炭失效判定的几个关键问题及建议

ISSN 1009-0177



9 771009 017221

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

臭氧-生物活性炭工艺与饮用水安全专刊

水厂生物活性炭失效判定的几个关键问题及建议	刘成, 兰童, 陈卫 ----- 01
臭氧-生物活性炭工艺处理饮用水研究进展	许兵, 李珂, 刘佳, 等 ---- 09
碘值在水厂生物活性炭应用中的指示作用	曹振桦, 笪跃武, 刘成, 等 ---- 19
生物活性炭工艺中失效的颗粒活性炭循环再利用试验	董丽华, 宋晨, 杨晓红, 等 ---- 26
生物活性炭运行过程中的强度变化规律及机理	冯昌龙, 庄星宇, 王慕, 等 ---- 37
生物活性炭使用过程中微生物群落变化规律及其对净化效能的影响	李聪聪, 刘成, 兰童, 等 ---- 46
长期运行的生物活性炭池失效风险评价	张孝洪, 赖浩林, 张可佳, 等 ---- 54
水厂生物活性炭颗粒灰分的累积规律	李聪聪, 刘成, 刘嘉琪, 等 ---- 65
低有机负荷条件下水厂活性炭池与中试单元去除效能比较	蒋才芳, 王健, 娄岩岩 ----- 71
水厂失效生物活性炭更换比例的生产性试验	张晶晶, 庄星宇, 胡侃, 等 ---- 77
汉江水源某水厂活性炭池工艺运行效果分析	李露, 蔡世颜, 邹磊, 等 ---- 86
臭氧-生物活性炭池反冲洗水中的微生物群落研究	陈强, 孙天晓, 唐玉霖 ----- 93
低氨氮原水生物活性炭工艺启动判定指标中试	张正斌, 谢剑根, 谢美萍, 等 --- 100
磁性吸附催化材料对水体污染物的净化效能	张万辉, 欧桦瑟, 曹雁, 等 --- 106
水厂生物活性炭工艺进出水中DON变化及其成因分析	李聪聪, 周克梅, 范佩, 等 --- 113
使用年限对已失效的生物活性炭热再生效能的影响	杨遇春, 刘成, 刘嘉琪, 等 --- 121
粉末活性炭去除原水中典型抗生素的试验	姜蕾, 金磊, 胡涛 ----- 127
臭氧-生物活性炭工艺对典型藻源致嗅物质的应急处置效能	叶子莹, 刘成 ----- 131
生物活性炭工艺的除锰效能及作用机制	冯昌龙, 刘成, 李聪聪, 等 --- 137
后置臭氧-生物活性炭工艺在水厂改造中的若干设计点探讨	徐彦飞, 戴仲怡 ----- 147
上向流生物活性炭工艺参数设计与处理效果分析	黄慧, 宋欣, 许钊 ----- 153
全年目次	-----
“我与《净水技术》”小故事	----- J3
征订	----- J4

CONTENTS

2022 No.12 Vol. 41 Serial No. 256

SPECIAL ISSUE ON OZONE-BIOLOGICAL ACTIVATED CARBON PROCESS AND DRINKING WATER SAFETY

Key Factors and Suggestion on Failure Judgement for Spent BAC in WTP	LIU Cheng, LAN Tong, CHEN Wei	01
Research Progress of Ozone-Biological Activated Carbon(O ₃ -BAC) Process for Drinking Water Treatment	XU Bing, LI Ke, LIU Jia, et al.	09
Indicative Effect of Iodine Value on Application of BAC in WTPs	CAO Zhenhua, DA Yuewu, LIU Cheng, et al.	19
Experiment of Recycling and Reuse for Spent Granular Activated Carbon in BAC Process	DONG Lihua, SONG Chen, YANG Xiaohong, et al.	26
Rule and Mechanism of Strength Variation for Biological Activated Carbon during Operation	FENG Changlong, ZHUANG Xingyu, WANG Mu, et al.	37
Variation Pattern of Microbial Communities and the Influence on Purification Efficiency in Operation Process of BAC	LI Congcong, LIU Cheng, LAN Tong, et al.	46
Failure Risk Evaluation of Long-Term Operation for BAC Filter	ZHANG Xiaohong, LAI Haolin, ZHANG Kejia, et al.	54
Accumulation Rules for Ash Content of Biological Activated Carbon Granules in WTP	LI Congcong, LIU Cheng, LIU Jiaqi, et al.	65
Contrast of Removal Efficiency of Activated Carbon Filter and Pilot Test Unit under Low Organic Load	JIANG Caifang, WANG Jian, LOU Yanyan	71
Productive Experiment on the Replacement Ratio of Spent Biological Activated Carbon in WTPs	ZHANG Jingjing, ZHUANG Xingyu, HU Kan, et al.	77
Performance Analysis of Activated Carbon Filter Operation in a WTP of Hanjiang River Raw Water	LI LU, CAI Shiyang, ZOU Lei, et al.	86
Study on Microbial Community in Backwash Water of Ozone-Biological Activated Carbon Filter	CHEN Qiang, SUN Tianxiao, TANG Yulin	93
Pilot-Scale Test of Judgement Indices for BAC Process Start-Up in WTPs with Raw Water of Low Ammonia Nitrogen	ZHANG Zhengbin, XIE Jianguo, XIE Meiping, et al.	100
Efficiency of Magnetic Adsorption Catalytic Materials for Pollutants Removal in Water	ZHANG Wanhui, OU Huase, CAO Yan, et al.	106
Variation of DON in Inflow and Outflow Water of BAC Process and Analysis of the Cause in WTP	LI Congcong, ZHOU Kemei, FAN Pei, et al.	113
Influence of Service Life on Performance of Thermal Regeneration for Spent BAC	YANG Yuchun, LIU Cheng, LIU Jiaqi, et al.	121
Experiment of Typical Antibiotics Removal in Raw Water by Powdered Activated Carbon	JIANG Lei, JIN Lei, HU Tao	127
Performance of O ₃ -BAC Process for Emergency Removal of Typical Algal Source Olfactory Substances	YE Ziying, LIU Chen	131
Efficiency and Mechanism of Biological Activated Carbon Process for Manganese Removal	FENG Changlong, LIU Cheng, LI Congcong, et al.	137
Discussion on Several Design Points of Post O ₃ -BAC Process in WTP Reconstruction	XU Yanfei, DAI Zhongyi	147
Parameter Design and Effect Analysis of Up-Flow BAC Process Advanced Treatment	HUANG Hui, SONG Xin, XU Zhao	153
Annual Index		IX
My Story with <i>WATER PURIFICATION TECHNOLOGY</i>		J3
Subscribe		J4