



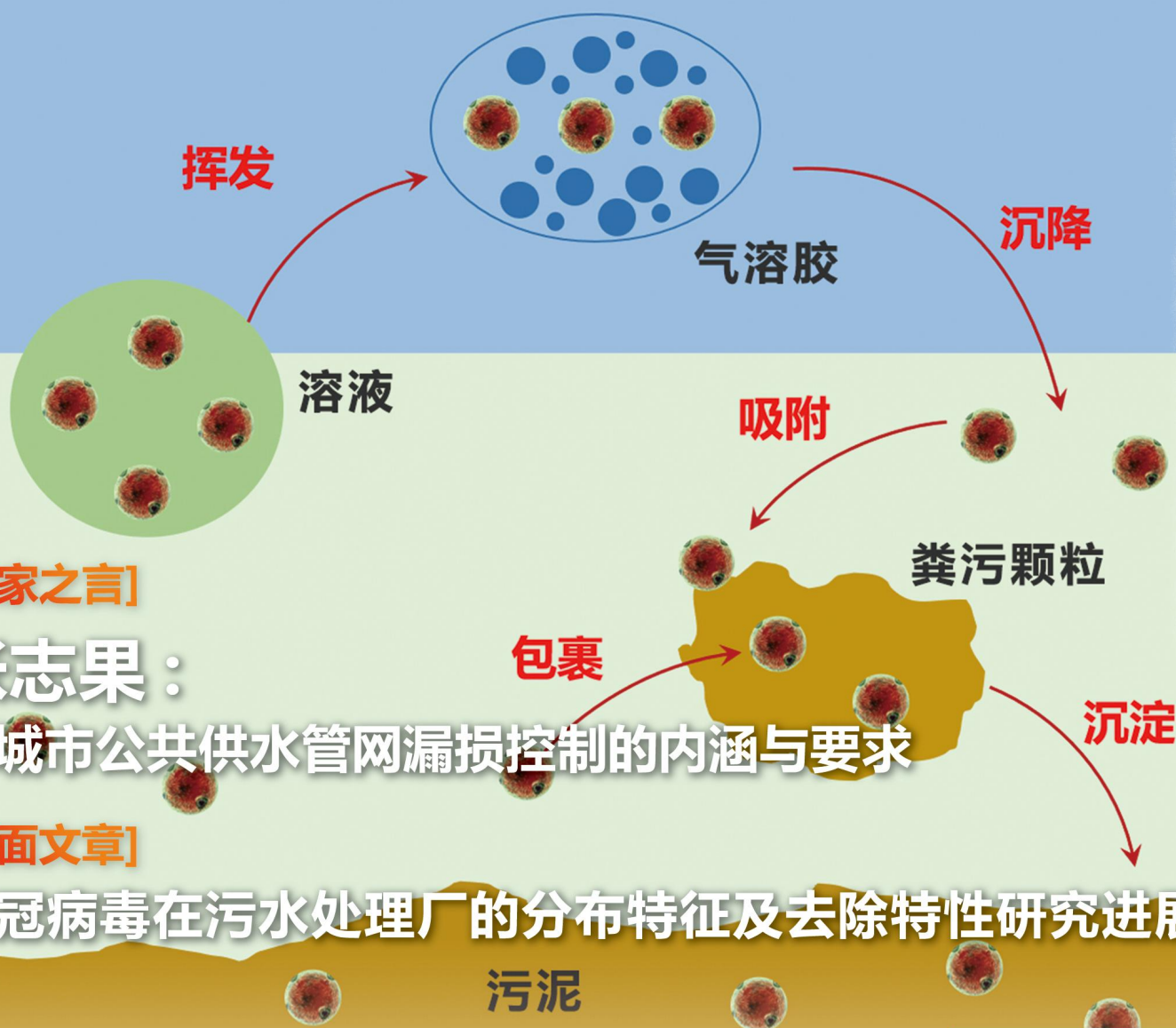
中国科技核心期刊
华东地区优秀期刊

2022
总第41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
投稿网址：zsjs.cbpt.cnki.net

净水技术[®]

Water Purification Technology



[大家之言]

张志果：
论城市公共供水管网漏损控制的内涵与要求

[封面文章]

新冠病毒在污水处理厂的分布特征及去除特性研究进展

ISSN 1009-0177



9 771009 017221

万方数据

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



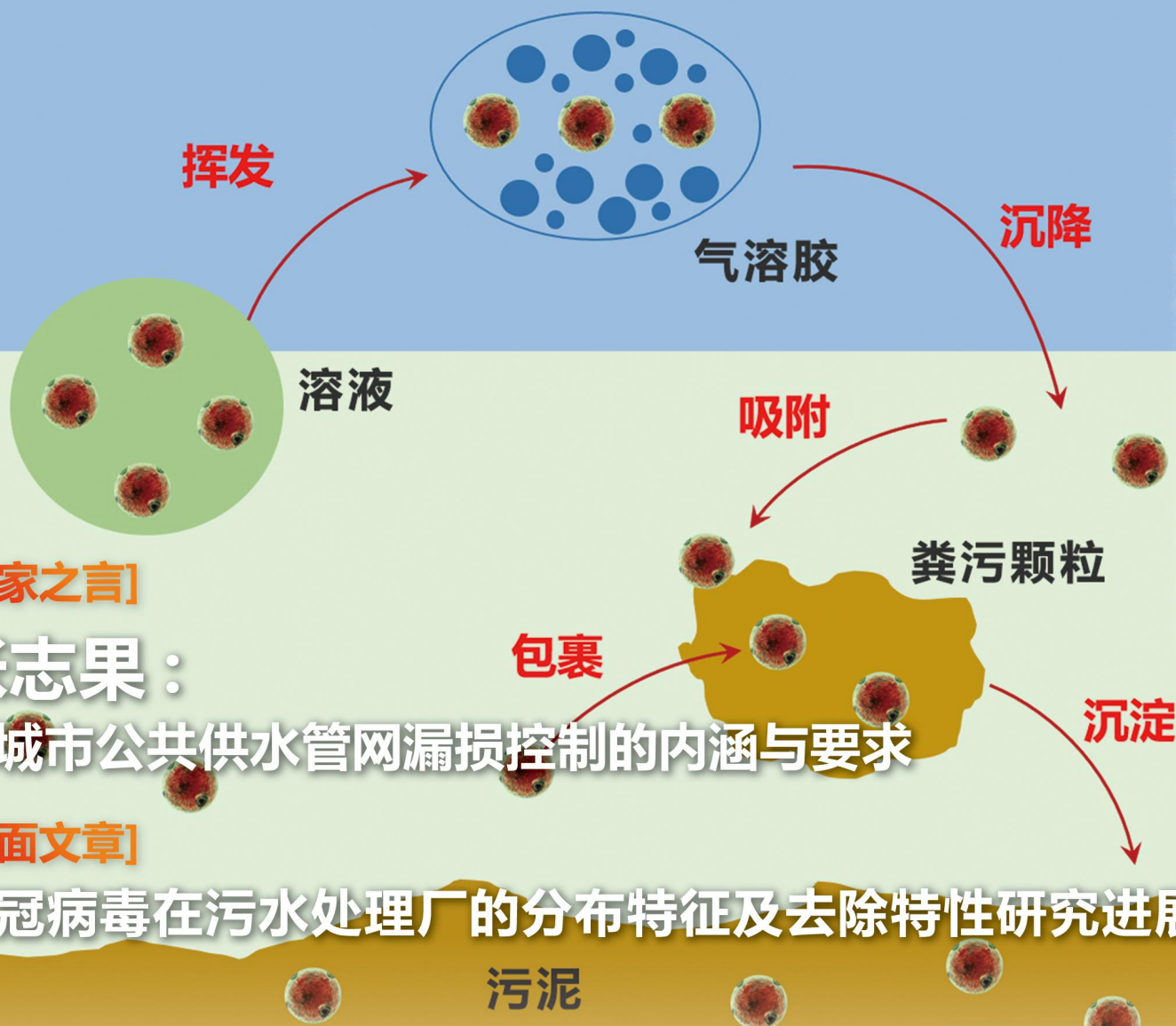
中国科技核心期刊
华东地区优秀期刊

2022
总第41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
投稿网址：zsjs.cbpt.cnki.net

净水技术[®]

Water Purification Technology



污水中的病毒分布及迁移规律

[大家之言]

张志果：
论城市公共供水管网漏损控制的内涵与要求

[封面文章]

新冠病毒在污水处理厂分布特征及去除特性研究进展

ISSN 1009-0177



9 771009 017221

万方数据

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

论城市公共供水管网漏损控制的内涵与要求

张志果 ----- 01

净水技术前沿与热点综述

城镇污水处理工艺去除病原微生物的研究进展

黄思伟, 刘成, 李荣, 等 --- 04

水中微塑料污染研究进展与热点分析

刘恢弘, 陈卫, 陶辉, 等 --- 14

新冠病毒在污水处理厂的分布特征及去除特性研究进展

徐悦, 陈家斌, 肖绍贇, 等 --- 23

水源与饮用水保障

氨氮复合污染含铁、锰地下水生物净化工程的启动运行

韩彬, 陈蕃, 邱迅 ----- 30

太浦河水体中抗生素赋存特征及生态风险

金磊, 姜巍巍, 姜蕾, 等 --- 35

三峡库区水质及影响因素的典型相关分析

王欲敏, 曾德芳, 阙思思, 等 --- 41

不同生长阶段的水华鱼腥藻模拟配水混凝处理效果

糜自栋, 赵亮, 宋武昌, 等 --- 48

污水处理与回用

不同藻菌配比下菌藻共生去除水产养殖废水中氮磷的试验

郁颖, 吴磊, 李先宁, 等 --- 54

污水处理厂二级出水粉末活性炭深度处理试验

关永年, 刘洪波, 黄剑虹, 等 --- 61

饲草植物对农村生活污水尾水氮磷营养盐吸收特性

于如海, 汪思宇, 王昀晨, 等 --- 66

上海某大型污水处理厂提标改造运行效能分析

储杰 ----- 75

工业水处理

尖晶石铁氧体纳米颗粒物催化降解苯酚磺酸废水的效果

王杰, 谢立源, 杨军, 等 --- 81

无磷缓蚀阻垢剂的复配及其性能

杨本仙, 陈康, 陈庆鸿 ----- 86

新生成的TiO₂沉淀絮体对水体中Mn²⁺的吸附

周赛赛, 赵金金, 张彬彬, 等 --- 93

其他水系统研究与应用

居民小区雨污分流工程质量评估方法的构建与应用

杨芳芳, 龚丽影, 朱光灿 ----- 100

基于水量水质监测进行分区分析的城市排水管网入流入渗问题

黄林, 胡茂锋, 吴志炎, 等 --- 108

热压式蒸馏水机节能优化分析

严彦, 高秀峰 ----- 115

基于遗传算法的二次供水低位水箱调度方案优化

高雨妃, 周立典, 张雪, 等 --- 121

城镇给排水工程设计案例专栏

改良AAO+磁混凝工艺在污水厂提标改造项目中的应用——以山东某污水处理厂为例

侯亚红, 顾雪锋, 李海龙, 等 --- 126

基于节地的水库水源水厂设计: 以湛江市麻章自来水厂工程为例

胡新立, 司徒菲, 张明, 等 --- 134

某北方水厂深度处理改造中工艺路线的比选和工程实践

郭兆学, 郭慧 ----- 141

城镇水系统全流程水质监测技术专栏

感官气相色谱对水中不同化合物嗅味特征的同步测定

郭巧媛, 王春苗, 杨帆, 等 --- 149

离子色谱法测定饮用水中丙烯酸测定法及不确定度分析

朱良琪, 邬晶晶, 马雯爽, 等 --- 155

“清时捷”供排水企业运行及管理成果专栏

低浊原水导致铝超标的水厂技术控制措施

陈虹, 张亮, 林春敬, 等 --- 164

原水厂集水井溶解氧过低原因分析及应对控制措施

袁君, 焦洁, 胡淑圆, 等 --- 169

CONTENTS

2022 No.4 Vol. 41 Serial No. 246

SUMMIT FORUM

Discuss on Connotations and Requirements of Leakage Control for Public Water Supply Networks

ZHANG Zhiguo ----- 01

FRONTIER OF WATER PURIFICATION TECHNOLOGY AND HOTSPOT OVERVIEW

Research Progress of Urban Wastewater Treatment Process for Pathogenic Microorganisms Removal

HUANG Siwei, LIU Cheng, LI Rong, et al. ----- 04

Research Progress and Hotspots Analysis of Microplastics Pollution in Water

LIU Huihong, CHEN Wei, TAO Hui, et al. ----- 14

Research Progress on Characteristics of Distribution and Removal for COVID-19 in WWTP

XU Yue, CHEN Jiabin, XIAO Shaoze, et al. ----- 23

GUARANTEE FOR WATER SOURCES AND DRINKING WATER

Start-Up and Operation of Biological Purification Project of Iron and Manganese Containing Groundwater Polluted by Ammonia Nitrogen

HAN Bin, CHEN Fan, QIU Xun ----- 30

Occurrence Characteristics and Ecological Risk of Antibiotics in Water Body of Taipu River

JIN Lei, JIANG Weiwei, JIANG Lei, et al. ----- 35

Water Quality of the Three Gorges Reservoir Area and Canonical Correlation Analysis of Influencing Factors

WANG Yumin, ZENG Defang, QUE Sisi, et al. ----- 41

Effect of Coagulation Treatment of *Anabaena flos-aquae* with Simulated Testing Water under Different Growth Stages

MI Zidong, ZHAO Liang, SONG Wuchang, et al. ----- 48

WASTEWATER TREATMENT AND REUSE

Experiment of Nitrogen and Phosphorus Removal in Aquaculture Wastewater by Helotism System under Different Ratios of Algae-Bacteria

YU Ying, WU Lei, LI Xianning, et al. ----- 54

Advanced Treatment Experiment of Powdered Activated Carbon for Secondary Effluent of WWTP

GUAN Yongnian, LIU Hongbo, HUANG Jianhong, et al. ----- 61

Characteristics of Absorption for Nitrogen and Phosphorus Nutrients in Tail Water of Rural Domestic Sewage by Forage Plants

YU Ruhai, WANG Siyu, WANG Yunchen, et al. ----- 66

Operation Efficiency Analysis of Upgrading and Reconstruction of a Large-Scale WWTP in Shanghai

CHU Jie ----- 75

INDUSTRIAL WATER TREATMENT

Effect of Spinel Ferrite Nanoparticles on Catalytic Degradation of Phenolsulfonic Acid Wastewater Treatment

WANG Jie, XIE Liyuan, YANG Jun, et al. ----- 81

Compound Additives and the Performance of Phosphate-Free Corrosion and Scale Inhibitor

YANG Benxian, CHEN Kang, CHEN Qinghong ----- 86

Adsorption of Mn^{2+} in Water Body by Newly Formed TiO_2 Sedimentation Floccs

ZHOU Saisai, ZHAO Jinjin, ZHANG Binbin, et al. ----- 93

RESEARCH AND APPLICATION OF OTHER WATER SYSTEMS

Construction and Application of Quality Evaluation Methods for Separated Diversion Project of Rain and Sewage Water in Residential Communities

YANG Fangfang, GONG Liying, ZHU Guangcan ----- 100

Inflow and Infiltration Problems of Urban Drainage Network Based on Zoning Analysis of Water Quantity and Quality Monitoring

HUANG Lin, HU Maofeng, WU Zhiyan, et al. ----- 108

Analysis of Energy Saving Optimization on VCD Water Distiller

YAN Yan, GAO Xiufeng ----- 115

Optimization of Scheduling Solution for Low-Level Water Tank in Secondary Water Supply System Based on Genetic Algorithm

GAO Yufei, ZHOU Lidian, ZHANG Xue, et al. ----- 121

COLUMN OF DESIGN CASE OF WATER SUPPLY AND DRAINAGE ENGINEERING

Application of Modified Process of AAO + Magnetic Coagulation in Upgrading and Reconstruction Project of WWTP—Case Study of a WWTP in Shandong

HOU Yahong, GU Xuefeng, LI Hailong, et al. ----- 126

WTP Design of Raw Water Source from Reservoir Based on Land Saving: Case of Mazhang WTP in Zhanjiang City

HU Xinli, SITU Fei, ZHANG Ming, et al. ----- 134

Comparison and Selection of Process Routes and Engineering Practice in Advanced Treatment and Reconstruction in a North WTP

GUO Zhaoxue, GUO Hui ----- 141

COLUMN OF WATER QUALITY MONITORING TECHNOLOGY FOR THE WHOLE PROCESS OF URBAN WATER SUPPLY

Simultaneous Determination of Odor Characteristics of Different Chemicals in Water by Gas Chromatography-Olfactometry

GUO Qiaoyuan, WANG Chunmiao, YANG Fan, et al. ----- 149

Determination of Acrylic Acid in Drinking Water by Ion Chromatography and Uncertainty Analysis

ZHU Liangqi, WU Jingjing, MA Wenshuang, et al. ----- 155

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

Technical Control Measures for Aluminum Overproof Caused by Raw Water Low Turbidity in WTP

CHEN Hong, ZHANG Liang, LIN Chunjing, et al. ----- 164

Analysis and Solution of Lower Dissolved Oxygen in Water-Collecting Well at Raw Water Plant

YUAN Jun, JIAO Jie, HU Shuyuan, et al. ----- 169