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| Altri autori (Persone) | MatsuoTomonori |
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| Nota di contenuto | Front Cover; Advances in Water and Wastewater Treatment Technology: Molecular Technology, Nutrient Removal, Sludge Reduction and Environmental Health; Copyrights Page; Preface; Contents; Section 1: Microbial Community Analysis; Chapter 1. Observation and model analysis for the bacterial community structure of activated sludge; Chapter 2. Stability, persistence and resilience in anaerobic reactors: a community unveiled; Chapter 3. Strategic approach for characterization of bacterial community in enhanced biological phosphate removal (EBPR) process<br>Chapter 4. Microbial community structure and their activity in aquatic environmentChapter 5. Analysis of complex microbial community in soil and wastewater treatment processes by cloning method; Chapter 6. Microbial community analysis of thermophilic contact oxidation process by using PCR-DGGE method; Chapter 7. Relating function and community structure of complex microbial systems using neural networks; Chapter 8. Comparison of microbial communities in anaerobic granulated sludge reactors treating benzoate, methyl |

benzoate and terephthalate; Section 2: Health-Related Microorganisms
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Chapter 14. Visualization of microscale distribution of nitrifying bacteria in biofilms formed in various type wastewater treatment processesChapter 15. Nitrous oxide production in nitrogen removal process treating domestic sewage from combined sewer system; Chapter 16. Quinone profile analysis of activated sludge in enhanced biological P removal SBR treating actual sewage; Chapter 17. Applicability of FISH, dot blot hybridization, antibody immobilized latex coagulation, and MPN techniques as enumeration methods for ammonia-oxidizing bacteria in various water environments
Chapter 18. Nitrous oxide and nitric oxide emissions during sulfur denitrification in soil-water systemChapter 19. FISHing for biomass in activated sludge mixed liquor: the slippery VSS fraction; Chapter 20. Identification of predominant microbial populations in a non-phosphate removing anaerobic aerobic bioreactor fed with fermented products; Chapter 21. Microbial aspects of autotrophic denitrification of wastewaters; Section 4: Sludge Reduction and Material Recovery
Chapter 22. Membrane bioreactor: an advanced wastewater treatment/reclamation technology and its function in excess-sludge minimization

Sommario/riassunto

This book is the result of the international symposium, ""Establishment and Evaluation of Advanced Water Treatment Technology Systems Using Functions of Complex Microbial Community"", organized in 2000 at the University of Tokyo.  The volume presents the most recent progress in application of microbial community analysis, health-related microorganisms management, nutrient removal, waste sludge minimization and materials recovery, and water management in tropical countries. Included in this work are the following major topics in wastewater treatment: application of various innovative