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Altri autori (Persone)	MaraD. Duncan <1944-> (David Duncan) HoranN. J
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Nota di contenuto	Cover; Contents; Part 1: Basic Microbiology; Contributors; Preface; Microbial nutrition and basic metabolism; Introduction to Microbes of Sanitary Importance; Viruses; Bacteria; Protozoa; Filamentous fungi in water systems; Microbial flora of the gut; Faecal indicator organisms; Detection, enumeration and identification of environmental microorganisms of public health significance; Fundamentals of biological behaviour and wastewater strength tests; Part 2: Water and Excreta Related Diseases; Microorganisms and disease Unitary environmental classification of water- and excreta-related communicable diseasesEmerging waterborne pathogens; Health effects of water consumption and water quality; Drinking-water standards for the developing world; Control of pathogenic microorganisms in wastewater recycling and reuse in agriculture; Developing risk assessments of waterborne microbial contaminations; Health constraints on the agricultural recycling of wastewater sludges; Effluent discharge standards; Part 3: Microbiology of Wastewater Treatment; Introduction to Microbiological Wastewater Treatment Fixed film processesBiofilm formation and its role in fixed film processes; Suspended growth processes; Protozoa as indicators of

wastewater treatment efficiency; The microbiology of phosphorus removal in activated sludge; Anaerobic treatment processes; The nitrogen cycle and its application in wastewater treatment; Low-cost treatment systems; Microbial interactions in facultative and maturation ponds; Sulphate-reducing bacteria; Behaviour of Pathogens in Wastewater Treatment Processes; Viruses in faeces; Bacterial pathogen removal in wastewater treatment plants
Fate and behaviour of parasites in wastewater treatment systemsProblems in Wastewater Treatment Processes; Activated sludge bulking and foaming: microbes and myths; Odour generation and control; Recalcitrant organic compounds; Heavy metals in wastewater treatment processes; Part 4: Drinking Water Microbiology; Surface waters; Stored water (rainjars and raintanks); Coagulation and filtration; Microbial response to disinfectants; Giardia and Cryptosporidium in water and wastewater; Biofilms in water distribution systems; Useful Websites; Index

Sommario/riassunto

'Access to safe water is a fundamental human need and therefore a basic human right' Kofi Annan, United Nations Secretary GeneralEdited by two world-renowned scientists in the field, The Handbook of Water and Wastewater Microbiology provides a definitive and comprehensive coverage of water and wastewater microbiology. With contributions from experts from around the world, this book gives a global perspective on the important issues faced in the provision of safe drinking water, the problems of dealing with aquatic pollution and the processes involved in wastewater managem