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Collana	Emerging Contaminants and Associated Treatment Technologies, , 2524-6410
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Soggetti	Pollution Environmental chemistry Water Hydrology Public health Refuse and refuse disposal Environmental health Environmental Chemistry Public Health Waste Management/Waste Technology Environmental Health
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part 1: State of the science on organic micropollutants in water and wastewater -- Chapter 1-Emerging contaminants in water and wastewater: monitoring, risk assessment and remediation techniques -- Chapter 2-Legacy and emerging contaminants in water: Origin, distribution and implications for human exposure and health -- Chapter 3-Groundwater contamination by persistent organic pollutants in India- A review -- Chapter 4-Fate, Transport and Effects of Pharmaceuticals and Personal Care Products in Urban Environment -- Chapter 5-Phenoxyacid herbicides in water ecosystems- a review on their fate, risk assessment and remediation techniques -- Part 2:

Monitoring of organic micropollutants and their associated risks -- Chapter 6-Water contamination and sources of plasticizers in Asia: a review -- Chapter 7-Antifouling Strategies & Environmental Issues in Industrial Cooling Water Systems in the Marine Environment -- Chapter 8-Measuring emerging contaminants in freshwater systems -- Chapter 9-Optical Techniques in Monitoring of Persistent Organic Pollutants (POPs) in Water and Waste Water -- Part 3: Current approaches for remediation of organic micropollutants -- Chapter 10-Pharmaceuticals in Indian Aquatic Environment: Risk and Implications for Management -- Chapter 11-Suspect and Non-target Screening of Pharmaceuticals in Water and Wastewater Matrices -- Chapter 12-Human exposure and health risks -- Chapter 13-Carbamazepine Residues in Wastewater and River Water: Occurrence, Estimation of Use, and Disposal of this Drug in a Small Community in Western Kentucky, USA -- Chapter 14-Source, Treatment and Management Options of Contaminants of Emerging Concerns (CECs) in Water -- Chapter 15-Emerging Contaminants in Water: Potential Risks and Remedial Techniques -- Chapter 16-Emerging Contaminants Removal from Domestic Wastewater by Advanced Treatment Technologies -- Chapter 17-Treatment Technologies for Emerging Contaminants in Water and Wastewater -- Chapter 18-Novel strategies to treat organic micropollutants -- Chapter 19-Advanced treatment technologies to combat antibiotic resistant bacteria and antibiotic resistance genes from urban wastewater -- Chapter 20-Nanotechnology based treatment strategies for removal of antibiotic and antibiotic byproducts from waste water -- Chapter 21-Levels, sources and removal efficiency of PCDDs/PCDFs and dl-PCBs in water and wastewater in Poland and Europe under the European water directives.

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#### Sommario/riassunto

This volume provides a collection of research findings on the distribution and risk associated with emerging contaminants (ECs) in water and wastewater across the globe, and effective remediation techniques and technologies. The book covers various monitoring techniques for ECs in water and wastewater and its related impacts on the ambient environment, and offers valuable information on cost-effective monitoring techniques and sustainable treatment technologies for ECs. The authors detail the risks and biological effects of ECs and legacy persistent organic pollutants (POPs) in freshwater and marine systems, including their adverse interactions with aquatic organisms, while also discussing the associated impacts on human health. The book comprehensively covers current research outcomes on treatment methods, cost-effectiveness, and infrastructure needs for effective removal of ECs. It will be of interest to students, researchers, and scholars in environmental science and engineering, water and wastewater, toxicology, environmental biotechnology, soil sciences, and microbial ecology.

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