1. Record Nr. UNINA9910853995003321

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Titolo	Clean Water: Next Generation Technologies [[electronic resource] /] / edited by Khouloud Jlassi, Mehmet A. Oturan, Ahmad Fauzi Ismail, Mohamed Mehdi Chehimi
Pubbl/distr/stampa	Springer International Publishing, 2024 Cham : , : Springer International Publishing : , : Imprint : Springer, , 2024
ISBN	3-031-48228-X
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (287 pages)
Collana	Advances in Science, Technology & Innovation, IEREK Interdisciplinary Series for Sustainable Development, , 2522-8722
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Disciplina	551.48
Soggetti	Water Hydrology Nanochemistry Environmental policy Environmental law, International Environmental Policy International Environmental Law
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Emerging water recovery processes from dew and light rain -- 2. Capacitive Deionization: A promising water treatment and desalination technology -- 3. Hydrophobic ceramic hollow fiber membrane: Fabrication and potential use in membrane distillation for desalination -- 4. Metal-organic frameworks as emerging materials for desalination -- 5. Nanofiber-based forward osmosis membrane for desalination -- 6. Recent progress and trends in water pollutant monitoring with smart devices -- 7. Water contamination in fish farms -- 8. Advanced Oxidation Processes -- 9. Fenton Related Advanced Oxidation Processes (AOPs) for water treatment -- 10. Prospects and challenges of electrooxidation and related technologies for the removal of

pollutants from contaminated water and soils -- 11. Porous composite catalysts for the removal of water organic pollutants: a materials chemist perspective -- 12. Advanced treatment of water polluted by hexavalent chromium -- 13. Microplastic and nanoplastic removal efficiency with current and innovative water technologies -- 14. MEMBRANE BIOREACTOR FOR SEWAGE TREATMENT -- 15. ELECTROCOAGULATION -- 16. Removal of organochlorine pesticides from soil and water -- 17. Recent Patents and modern industrial devices for clean water.

Sommario/riassunto

This book summarises the recent, and future, sustainable, low-cost, environment-friendly and efficient systems for clean water production, to solve clean water crisis. We cover production of water the dew and rain or via desalination, Fenton processes or electrocoagulation; nanomaterial-based water purification methods including adsorption, catalysis, smart-sensors for pollutants detection and removal. We also cover environmental management, environmental policy aspects, and review recent patents and industrial processes to produce clean water. Written by experts in the domain of wastewater treatment, production of clean water and environmental management, this new book will be a unique tool for experts and students. We anticipate it open new horizons in clean water production and will be a source of inspiration for next generations of clean water technologies researchers.