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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.
