1. Record Nr. UNINA9910366647803321

Titolo	Arsenic Water Resources Contamination : Challenges and Solutions / / edited by Ali Fares, Sushant K. Singh
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-21258-0
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (305 pages)
Collana	Advances in Water Security, , 2523-3572
Disciplina	333.91 628.1666
Soggetti	Water - Pollution Aquatic ecology Medical policy Waste management Environmental health Waste Water Technology / Water Pollution Control / Water Management / Aquatic Pollution Freshwater & Marine Ecology Health Policy Waste Management/Waste Technology Environmental Health
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter1: Groundwater arsenic contamination and availability of safe water for drinking in Middle Ganga Plain in India -- Chapter2: Geomorphic controls on spatial arsenic distribution in aquifers of the Brahmaputra River floodplains -- Chapter3: Reductive dissolution of Fe-oxyhydroxides a potential mechanism for arsenic release into groundwater in the alluvial plain of river Brahmaputra -- Chapter4: Sources of arsenic exposure in well-nourished children -- Chapter5: Environmental arsenic exposure and human health risk -- Chapter6: Sustainable arsenic mitigation: problems and prospects in India -- Chapter7: Arsenic Contamination of Soil in Relation to Water in Northeastern South Africa -- Chapter8: Arsenic contamination of India’

s groundwater: a review and critical analysis -- Chapter9: Biosorption of Arsenic: An Emerging Eco-technology of Arsenic Detoxification in Drinking Water -- Chapter10: Assessing and mapping human health risks due to arsenic and socioeconomic correlates for proactive arsenic mitigation -- Chapter11: Arsenic-contaminated drinking water and the associated health effects in the Shahpur block of Bihar: a case study from five villages -- Chapter12: Arsenic contamination of drinking water and mitigation in Pakistan: a case of Indus river basin.

Sommario/riassunto

This edited volume brings together a diverse group of environmental science, sustainability and health researchers to address the challenges posed by global mass poisoning caused by arsenic water contamination. The book sheds light on this global environmental issue, and proposes solutions to aquatic contamination through a multi-disciplinary lens and case studies from Bangladesh and India. The book may serve as a reference to environment and sustainability researchers, students and policy makers. Part one of the book describes the issue of arsenic contamination in ground water and river basins, including its source and distribution in specific locations in India. Part two explains the routes of exposure to environmental arsenic, its transport in aquatic ecosystems, and the health risks linked to arsenic exposure in food and the environment. Part three addresses sustainable arsenic contamination mitigation strategies and policies, the socioeconomic, demographic, cultural and psychological aspects of arsenic contamination, and the potential applications of GIS and remote sensing in providing solutions. Part four concludes by discussing the role of local and regional institutions in water resources management for a variety of issues including but not limited to arsenic contamination, and presents a case study in the Indus river basin in Pakistan to propose future contamination mitigation strategies.