Record Nr. UNINA9910830259803321 Arsenic contamination of groundwater [[electronic resource]]: **Titolo** mechanism, analysis, and remediation / / edited by Satinder Ahuja Pubbl/distr/stampa Hoboken, N.J., : Wiley, c2008 **ISBN** 1-281-83131-X 9786611831318 0-470-37104-8 0-470-36926-4 Descrizione fisica 1 online resource (420 p.) Altri autori (Persone) AhujaSatinder <1933-> Disciplina 628.1/6 628.16 Groundwater - Pollution Soggetti Arsenic - Environmental aspects Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto ARSENIC CONTAMINATION OF GROUNDWATER: CONTENTS: Contributors; Preface; 1 The Problem of Arsenic Contamination of Groundwater: 2 Fate of Arsenic in Irrigation Water and Its Potential Impact on the Food Chain: 3 Microbial Controls on the Geochemical Behavior of Arsenic in Groundwater Systems; 4 Molecular Detection of Dissimilatory Arsenate-Respiring Bacteria in North Carolina Groundwater; 5 Biogeochemical Mechanisms of Arsenic Mobilization and Sequestration; 6 Geomicrobiology of Iron and Arsenic in Anoxic Sediments 7 Development of Measurement Technologies for Low-Cost, Reliable, Rapid, On-Site Determination of Arsenic Compounds in Water8 Field Test Kits for Arsenic: Evaluation in Terms of Sensitivity, Reliability, Applicability, and Cost; 9 Mucilage of Opuntia ficus-indica for Use as a Flocculant of Suspended Particulates and Arsenic; 10 Prediction of Arsenic Removal by Adsorptive Media: Comparison of Field and Laboratory Studies: 11 Arsenic Remediation of Bangladesh Drinking

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Provides a viable reference, describing the state-of-knowledge on sources of arsenic contamination in ground water, which affects about 100 million people worldwide. With contributions from world-renowned experts in the field, this book explores developments in the transport kinetics, detection, measurement, seasonal cycling, accumulation, geochemistry, removal, and toxicology of arsenic. Includes compelling case studies describing how arsenic contamination occurs and the devastating effects on the people and environment affected by it.