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Discussion"; "3.4 Conclusions"; "3.5 References"; "Chapter 4 Competitive Effects on the Dechlorination of Chlorinated Aliphatic Hydrocarbons by Zero-Valent Iron"; "4.1 Introduction"; "4.2 Materials and Methods"; "4.3 Results and Discussion"; "4.4 Conclusions"; "4.5 References"

"Chapter 5 Removal of Hexavalent Chromium from Groundwater Using Zero-Valent Iron Media""5.1 Introduction"; "5.2 Removal Mechanisms"; "5.3 Reaction Kinetics"; "5.4 Other In Situ Cr(VI) Removal Methods"; "5.5 Case Studies"; "5.6 Conclusions"; "5.7 References"; "Section II: Removals of Nitrate and Arsenic using Zero-valent Iron"; "Chapter 6 Aqueous Nitrate Reduction by Zero-Valent Iron Powder"; "6.1 Introduction"; "6.2 Experimental Section"; "6.3 Results and Discussion"; "6.4 Conclusions and Recommendations"; "6.5 References"

"Chapter 7 Removal of Nitrate from Water by a Combination of Metallic Iron Reduction and Clinoptilolite Ion Exchange Process""7.1 Introduction"; "7.2 Materials and Methods"; "7.3 Results and Discussions"; "7.4 Summary"; "7.5 References"; "Chapter 8 Utilization of Zero-Valent Iron for Arsenic Removal from Groundwater and Wastewater"; "8.1 Introduction"; "8.2 Batch Tests with Non Mine-Impacted Waters"; "8.3 Batch Test with Acid Mine Drainage"; "8.4 Effects of Competing Inorganic Anions on Arsenic Removal by Zero-Valent Iron"; "8.5 Column Tests and Field Applications""8.6 Mechanisms of Arsenic Removal by Zero-Valent Iron""8.7 Alternative Materials of Iron and Aluminum Oxides for Arsenic Removal"; "8.8 Knowledge Gaps and Research Needs"; "8.9 Conclusions"; "8.10 References"; "Chapter 9 Removal of Arsenic from Groundwater€?Mechanisms, Kinetics, Field/Pilot and Modeling Studies"; "9.1 Introduction"; "9.2 Mechanism of Removal and Competing Ion Effects"; "9.3 Field/Pilot Studies and Modeling"; "9.4 Design Considerations"; "9.5 Conclusions"; "9.6 References"; "Section III: Innovative Iron-based Reactive Materials"

"Chapter 10 The Performance of Palladized Granular Iron: Enhancement and Deactivation"

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