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Nota di contenuto	Background and History of Coal -- Techniques for Sulfur Removal from Coal -- Microorganisms for Sulfur Removal from Coal -- Mechanism of Sulfur Removal Using Biological Approach -- Enzymology of Bio-desulfurization Process -- Biological Desulfurization Process -- Reactor for Bio-desulfurization of Coal -- Overview of Different Process Parameters -- Kinetic and Modeling Studies of Bio-desulfurization of Coal -- Challenges and Perspectives of Bio-desulfurization of Coal.
Sommario/riassunto	This book provides a comprehensive overview of the different strategies and mechanisms for the removal of sulfur-containing compounds from coal. The combustion of sulfur-containing compounds in coal emits sulfur oxides, which can cause adverse effects on health, the environment, and the economy. The chapters in this book give a thorough overview of the desulfurization of coal through methods such as hydrodesulfurization, extractive desulfurization, oxidative desulfurization, bio-desulfurization and desulfurization through alkylation, chlorinolysis, and using supercritical water. The subsequent chapters place greater emphasis on the bio-desulfurization of coal using microorganisms, enzymes, and biocatalysts, where it

describes the bioreactors, different process parameters, kinetic and modeling of the bio-desulfurization process, challenges, and future perspective. The content of this book caters to academic researchers, chemical engineers, and policymakers who are interested in reducing sulfur emissions from coal fuel sources for a more green and sustainable practice.
