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Descrizione fisica	1 online resource (276 pages)
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Nota di contenuto	1. Introductory Chapter: Is Biochar Safe? -- 2. A Mini Review of Biochar Synthesis, Characterization, and Related Standardization and Legislation -- 3. Forest Trees for Biochar and Carbon Sequestration: Production and Benefits -- 4. Mechanism of In-Situ Catalytic Cracking of Biomass Tar over Biochar with Multiple Active Sites -- 5. Comparative Evaluation of Hydrochars and Pyrochars for Phosphate Adsorption from Wastewater -- 6. Biochar Application for Improved Resource Use and Environmental Quality -- 7. Importance of Biochar in Agriculture and Its Consequence -- 8. Biochar Potential in Improving Agricultural Production in East Africa -- 9. Enhancement of Soil Health Using Biochar -- 10. Challenges of Biochar Usages in Arid Soils: A Case Study in the Kingdom of Saudi Arabia -- 11. The Use of Biochar as a Soil Amendment to Reduce Potentially Toxic Metals (PTMs) Phytoavailability -- 12. Biochar Effects on Amelioration of Adverse Salinity Effects in Soils -- 13. Sorption of Heavy Metals onto Biochar -- 14. Biochar-Assisted Wastewater Treatment and Waste Valorization -- 15. Application of Biochar for Treating the Water Contaminated with Polar Halogenated Organic Pollutants.
Sommario/riassunto	Biochar is a carbon-rich material produced from the pyrolysis of organic materials from agricultural and forestry biomass at a relatively low temperature in the absence of oxygen. As such, it has potential for solving many agricultural and environmental problems. This book is divided into five sections: "Introduction," "Production and Legislation of

Biochar," "Applications of Biochar for Soil Fertility Improvement," "Role of Biochar for Soil Remediation and Ameliorating Salinity Effects" and "Applications of Biochar for Water Treatment." Chapters address topics such as the pros and cons of biochar, its production, and its role in remediating and treating contaminated soils and water.
