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Nota di contenuto	Intro -- Contents -- Engineered Biochar: Fundaments -- Pristine Biochar and Engineered Biochar: Differences and Application -- 1 Introduction -- 2 Production of Pristine Biochar -- 3 Modified Biochar -- 3.1 Physical Modification -- 3.2 Chemical Modification -- 3.3 Biochar-Based Composite -- 4 Applications of Biochar -- 4.1 Biochar for Soil Conditioning and Carbon Sequestration -- 4.2 Biochar for Remediation of Pollutants from Aqueous Medium -- 4.3 Biochar Application for Removal of the Pathogen -- 5 Factors Affecting Adsorption by Biochar -- 5.1 pH -- 5.2 Functional Groups Present in Biochar -- 5.3 Minerals in Biochar -- 6 Conclusion and Recommendation for Future Direction -- References -- Waste to Wealth: Types of Raw Materials for Preparation of Biochar and Their Characteristics -- 1 Introduction -- 2 Biochar Characterization -- 3 Classification of Biochar -- 4 Raw Materials for the Preparation of Biochar -- 4.1 Effect of Type of Raw Material on Biochar Properties -- 5 Conclusion -- References -- Biochar Preparation by Different Thermo-Chemical Conversion Processes -- 1 Introduction -- 2 Biomass Pyrolysis -- 2.1 Overview of the Pyrolysis Process -- 2.2 Slow Pyrolysis -- 2.3 Intermediate Pyrolysis -- 2.4 Fast Pyrolysis -- 2.5 Microwave Pyrolysis -- 3 Biomass Gasification -- 4 Biomass Hydrothermal Carbonization (HTC) -- 5 Conclusion and Prospects -- 5.1 An Overview of the Current Status of Biochar Production --

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