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Altri autori (Persone)	GaoBin (Environmental engineer) WisniewskiAlberto
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Nota di contenuto	Chapter 1. Sustainable transformation of agricultural waste into value-added end products through thermochemical approach and end product characteristics -- Chapter 2. Value-Added End Products from Agriculture Residues through Biological Route and End Products Applications -- Chapter 3. Advancements in Hydrogen Production Technologies from Agricultural Waste -- Chapter 4. Agricultural Waste as a Source of Fine Chemicals through Thermochemical Methods -- Chapter 5. Biochar as a Filter Media for Air Pollution Control Systems -- Chapter 6. Valorisation of Agricultural waste into a Low Cost-Adsorbent: Perspective of Reutilization -- Chapter 7. Application of Biochar in Removal of Per- and polyfluoroalkyl substances from aqueous medium -- Chapter 8. Biochar based fertilizers – a smart solution for sustainable agriculture -- Chapter 9. Biomass Conversion to Synthetic Aviation Fuels -- Chapter 10. Utilization of Agricultural Wastes and Byproducts in Asphalt: A Critical Review -- Chapter 11. Innovative Biosensors from Agro-Waste: Laser and Microwave Approaches for Current and Future Applications in Environmental Health -- Chapter 12. Upcycling Coconut Husk Byproducts:

Transitioning from Traditional Applications to Emerging High-Value Usages.

Sommario/riassunto

This book provides awareness about utilizing the agricultural waste to assist sustainable development goals (SDGs) through the adaptation of such waste-to-energy technologies. It discusses the synthesis, characterization, and environmental utilization of biofuels produced from agriculture-derived wastes. The application of circular economy, insights and opportunities of recent issues, and ideas for the potential enhancement of agricultural waste-derived products are also explored. About a third of all biomass waste is produced by agriculture, making it one of the largest contributors to global biomass waste. Different biochemical and thermochemical processes can transform this waste into a wide range of value-added products. Such biomass-to-biofuel trends have gained a prominent status in the global energy system. And the agro-waste-derived products can provide potential solutions to a wide range of environmental problems. The primary audience shall be academicians, researchers, engineers, scientists, and managers working in the field of agricultural residue management and waste biomass to energy. .