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Altri autori (Persone)	BhardwajAbhishek Kumar KumarMukesh
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Nota di contenuto	Chapter 1: Biomass waste is a boon or bane for society: A comprehensive analysis -- Chapter 2: Approach to reducing agricultural waste via sustainable agriculture practices -- Chapter 3: Biomass waste and bio-energy production: Challenges and alternatives -- Chapter 4: Enzyme-Mediated Strategies for Effective Management and Valorization of Biomass Waste. Chapter 5: Nanotechnological advancements for enhancing lignocellulosic biomass valorization -- Chapter 6: A state of art of biofuels production using biomass wastes: Future perspectives -- Chapter 7: Role of pre-treatment approaches to generate value-added products using agriculture biomass -- Chapter 8: Utilizing Biomass-Derived Composites in 3D Printing to Develop

Eco-friendly Environment -- Chapter 9: Bioenergy production using biomass wastes: Challenges of circular economy -- Chapter 10: Application of enzymes in biomass waste management -- Chapter 11: Pre-treatment techniques for derivation of value-added products from agro-wastebiomass -- Chapter 12: Significance of enzymatic actions in biomass waste management: Challenges and future scope. Chapter 13: Bioeconomy: A Sustainable Approach for Biomass Waste Management -- Chapter 14: Application of Flower Wastes to Produce Valuable Products -- Chapter 15: Myco-degradation of Lignocellulosic waste biomass and their applications -- Chapter 16: Value added product development utilizing the food wastes -- Chapter 17: Role of bacterial degradation in Lignocellulosic Biomass for biofuel production -- Chapter 18: Cultivating a Greener Tomorrow: Sustainable Agriculture Strategies for Minimizing Agricultural Waste.

Sommario/riassunto

This volume discusses the reduction, recycling, and reuse of industrial and agricultural biomass wastes to develop value-added products using environmentally sustainable practices and technologies. Through these waste valorization approaches, biomass waste materials can be converted into useful bio-chemical products, sustainable construction materials, polymers, bio-energy, and bio-fuel as sustainable alternatives to products and materials with negative environmental and health consequences. The chapters highlight the development and implementation of eco-friendly solutions to biomass waste production with the aim of reducing natural resource deterioration, bolstering rural and small-scale business systems in communities impacted by pollution and climate change, and providing power from residual biomass to broadly reduce environmental impacts through improved waste management practices. The book is intended to be a useful resource for researchers, policymakers, NGOs, government agencies, and local community authorities working in waste management and environmental sustainability.