

1. Record Nr.	UNINA9910872190203321
Titolo	Transforming Agriculture Residues for Sustainable Development : From Waste to Wealth // edited by Jaya Arora, Abhishek Joshi, Ramesh C. Ray
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
ISBN	3-031-61133-0
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (425 pages)
Collana	Waste as a Resource, , 2731-8230
Disciplina	363.7288
Soggetti	Refuse and refuse disposal Environmental engineering Biotechnology Bioremediation Renewable energy sources Sustainability Agricultural biotechnology Waste Management/Waste Technology Environmental Engineering/Biotechnology Renewable Energy Environmental Biotechnology Agricultural Biotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Section 1. Introduction -- Agriculture Waste and Its Impact on the Environment -- Valorization Strategies for Agriculture Residues: An Overview -- Section 2. Routes for Value Addition to Agricultural Waste -- Biochemical and Thermochemical Conversion Technologies for Agriculture Waste -- Biotechnological Approaches for Agriculture Waste Transformation -- Emerging Technologies for Efficient Extraction of Value From Agriculture Waste -- Production of Metallic Nanoparticles From Agriculture Waste and Their Applications -- Section 3. Recent Trends in Valorization of Agricultural Waste -- Production of Bioactive Compounds From Agriculture Residues With Food and Pharmaceutical Applications -- Agricultural Waste for Bio-Fertilizers and Soil

Amendments -- Conversion of Agricultural Residue Into High-Value Animal Feed and Bedding -- Sustainable Packaging Solutions From Agriculture Waste -- Conversion of Agriculture Residues for Bioenergy Production -- Utilization of Agriculture Waste in Water and Wastewater Treatment -- Agriculture Waste for Sustainable Building Materials -- Case Studies in Successful Applications of Agriculture Waste Transformation: Cassava -- Section 4. Public Policy and Circular Economy -- Economic Viability and Policy Implications of Agriculture Waste Valorization -- Challenges and Future Perspectives in Agriculture Waste Valorization -- Concluding Remarks. A Roadmap to Sustainable Development Through Waste Valorization.

Sommario/riassunto

Agricultural residues are a significant waste product of modern agriculture. These residues mainly include crop residues, industrial processing wastes, livestock wastes, and fruit and vegetable wastes and are usually left to decompose, leading to environmental degradation and health hazards. However, with the growing demand for sustainable agriculture practices, there is a need to find innovative ways to utilize these residues. Transforming Agriculture Residues for Sustainable Development: From Waste to Wealth comprehensively explores the potential of agriculture waste valorization, showcasing innovative technologies and applications that meet the challenges of converting waste materials into valuable resources. By addressing various aspects of the agricultural waste-to-wealth paradigm, this invaluable guide will be helpful for researchers, policymakers, and industry professionals seeking sustainable solutions for agricultural residue management and the transition to a more circular economy. Looks at sectors where agriculture waste can be converted into any useful commodity; Explores the economic viability and policy implications of agriculture waste valorization; Includes case studies. .
