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Titolo	Bio-valorization of Waste : Trends and Perspectives / / edited by Shachi Shah, V. Venkatramanan, Ram Prasad
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Descrizione fisica	1 online resource (356 pages)
Collana	Environmental and Microbial Biotechnology, , 2662-169X
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Soggetti	Microbial genetics Bacteria Environmental engineering Biotechnology Bioremediation Environmental chemistry Microbial Genetics Environmental Engineering/Biotechnology Environmental Chemistry
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Livello bibliografico	Monografia
Nota di contenuto	Microbial Valorization of Coir Pith for Development of Compost and Bioethanol Production -- Transforming the lignocellulosic biomass into high value-added bioproducts.-Microbial mediated valorization of lignocellulose: A green technology for bioethanol production -- Microbial Valorization: Strategies for Agro-industry Wastes Minimization and Value-Added Product Generation -- Valorization of agri-food wastes -- Turning wastes into resources: Exploiting microbial potential for the conversion of food wastes into Polyhydroxyalkanoates -- Bacterial cellulose production from agro-industrial and food wastes -- Transformation process of agricultural waste to chemical production via solid-state fermentation -- Bioleaching from coal wastes and tailings: A sustainable biomining alternative -- Recent advances in wastewater sludge valorization -- Agricultural waste Valorization: An energy production perspective -- Microbial approach for valorization of mining wastes and tailings: An

	overview -- Microbial degradation of lignocellulosic biomass to obtain high-added value products -- Biorefinery: Potential and Prospects for Utilization of Biogenic Wastes -- Life Cycle Assessment of Lignocellulosic Waste Biorefinery.
Sommario/riassunto	This book explores the concept and methods of waste management with a new approach of biological valorization. Waste valorization is a process that aims to reduce, reuse, and recycle the waste into usable, value-added, and environmental benign raw materials which can be a source of energy. The book brings together comprehensive information to assert that waste can be converted into a resource or a raw material for value addition. Waste valorization imbibes the natural recycling principles of zero waste, loop closing, and underlines the importance of sustainable and environmentally friendly alternatives. Drawing upon research and examples from around the world, the book is offering an up-to-date account, and insight into the contours of waste valorization principles, biovalorization technologies for diverse group of wastes including agricultural, municipal, and industrial waste. It further discusses the emerging paradigms of waste valorization, waste biorefineries, valorization technologies for energy, biofuel, and biochemical production. The book meets the growing global needs for a comprehensive and holistic outlook on waste management. It is of interest to teachers, researchers, scientists, capacity builders and policymakers. Also, the book serves as additional reading material for undergraduate and graduate students of biotechnology and environmental sciences.