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Nota di contenuto	Part 1 Introductory Chapters -- 1 Emerging Frontiers of Microbes as Agro-waste Recycler -- 2 Microbes: the next generation bioenergy producers -- 3 Emerging and eco-friendly approaches for waste management -- 4 Ecofriendly microbial biofuel production from waste -- 5 Bioremediation: Current research trends and applications -- 6 Bioremediation: an approach for environmental pollutants detoxification -- 7 Bioethanol extraction and its production from agricultural residues for sustainable development -- Part 2 Biotechnological approaches -- 8 Byproduct valorization of vegetable oil industry through biotechnological approach -- 9 Omics tools: Approaches for microbiomes analysis to enhance bioenergy production -- 10 Omics (genomics, proteomics, metabolomics etc.) tools to study the environmental microbiome and Bioremediation -- Part 3 Industrial waste management -- 11 Microalgae: Omics approaches for biofuel production and biomedical research -- 12 WasteUtilization and Minimization in Food Industry.-13 Ligninolytic microbes and their role in effluent management of pulp and paper industry -- 14 Production of Polyhydroxyalkanoates using waste as raw materials. 15 Newer Aspects of Waste-to-Valorisation Technologies in Food Industry -- 16 Xylanase in waste management and its industrial applications -- 17 Organic Acid

Production from Agricultural Waste. .

Sommario/riassunto

This book addresses waste generation problems from various sectors, including industries, agriculture, and household. It focuses on how modern biotechnological approaches could help manage waste in an eco-friendly manner and generate precious bioenergy. It discusses the inadequate waste management systems damaging the environment and its adverse impacts on climate change-related problems. This book covers all the essential information regarding various types of waste and their management. It is a comprehensive compilation for understanding the efficient generation of bioenergy. It is a relevant reading material (resource) for anyone who wishes to study waste management as Chemist, Biologist, Biotechnologist, Industrialist, Ecologist, Microbiologist, Economist, and all disciplines related to the environment.