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| Soggetti                | Waste management<br>Environmental engineering<br>Biotechnology<br>Biochemical engineering<br>Biomedical engineering<br>Cell culture<br>Waste Management/Waste Technology<br>Environmental Engineering/Biotechnology<br>Biochemical Engineering<br>Biomedical Engineering/Biotechnology<br>Cell Culture   |
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| Livello bibliografico   | Monografia   |
| Nota di bibliografia    | Includes bibliographical references.   |
| Nota di contenuto       | Chapter 1. A Comprehensive Study of Food Waste to Biogas Plant: Paths to Improve the Performance – A Case Study -- Chapter 2. Resource Recovery From Organic Fraction Of Municipal Solid Waste Using Anaerobic Digestion And Hydrothermal Carbonisation -- Chapter 3. Effect of Inoculation on Anaerobic Digestion of Food Waste -- Chapter 4. Bio Sorption of Cr (VI) From Aqueous Solutions by Pericarp of Pongamia Pinnata -- Chapter 5. A Comparative Study of the Fuel Characteristics between Algal Biodiesel and Petro-Diesel -- Chapter 6. Production of Bioethanol from Green Alga Chlorella Vulgaris: An Important Approach to Utilize Algal Feedstock or Waste -- Chapter 7. Biogas Production from Fat, Oil, Grease and Effect of Pre-Treatment -- Chapter 8. Predicting Biomethanation Pattern from Feedstock |

Composition for Biomass Residues -- Chapter 9. Yield Improvement of Biodiesel from Chlorella Vulgaris by Media Optimisation and Transesterification -- Chapter 10. Synthesis of Cellulose from Peanut Shell Waste and its use in Bioethanol Production.

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Sommario/riassunto

This book focuses on the utilization of bio-resources and their conversion pathways for a sustainable future. Tapping into bio-resources by means of thermochemical and biochemical processes has attracted researchers from all over the world; it is a broad area that has given birth to concepts like the biorefinery, as well as a new stream known as biotechnology. Its scope includes biochemical and microbiological engineering, biocatalysis and biotransformation, biosynthesis and metabolic engineering, bioprocess and biosystem engineering, bioenergy and biorefineries, cell culture and biomedical engineering, food, agricultural and marine biotechnology, bioseparation and biopurification engineering, bioremediation and environmental biotechnology, etc. The book discusses a host of new technologies now being used to tap these resources with innovative bioprocesses. All chapters are based on outstanding research papers selected for and presented at the IconSWM 2018 conference. .

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