

1. Record Nr.	UNINA9910799249103321
Titolo	Biomass Conversion and Sustainable Biorefinery [[electronic resource]] : Towards Circular Bioeconomy / / edited by Muhammad Adly Rahandi Lubis, Seng Hua Lee, Efri Mardawati, Souvia Rahimah, Petar Antov, Robi Andoyo, uboš Krišák, Bambang Nurhadi
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2024
ISBN	981-9977-69-X
Edizione	[1st ed. 2024.]
Descrizione fisica	1 online resource (VIII, 306 p. 55 illus., 35 illus. in color.)
Collana	Green Energy and Technology, , 1865-3537
Disciplina	660.0286 547
Soggetti	Green chemistry Power resources Energy policy Energy and state Renewable energy sources Green Chemistry Natural Resource and Energy Economics Energy Policy, Economics and Management Renewable Energy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Current Progress on Biomass Pretreatment: The Key for Its Valorization -- 2. Recent Updates on Biopolymers: Precursors, Process, Properties, Challenge and Future Perspectives -- 3. Potential Application of Agro-industrial byproduct for Bacterial Cellulose Production; Its Challenges and Emerging Trends for Food Packaging -- 4. Biomass valorisation for bioenergy production -- 5. Biomass Utilization and Biorefinery By-Product from Palm Oil and Marine Resources for Animal Feed and Feed Additive.
Sommario/riassunto	This book highlights recent progress on the advancements toward optimization of major biorefinery processes, including biomass pretreatment and fractionation, saccharification of sugars, and

conversion of sugars and lignin into fuels and chemical precursors. The continual improvement of these processes and their integration in the format of a modern biorefinery is paving the way for a sustainable bio-economy that will displace large portions of petroleum-derived fuels and chemicals with renewable substitutes. Written by leading researchers from academia and well-renowned industry professionals, this book provides a comprehensive review of various aspects related to the recent developments in biomass conversion and biorefinery, aimed at successfully implementing the circular economy principles in various industries.
