

1. Record Nr.	UNINA9911007197403321
Titolo	Biomass and Biowaste : New Chemical Products from Old / / Alina M. Balu, Araceli García Nuñez
Pubbl/distr/stampa	Berlin ; ; Boston : , : De Gruyter, , [2020] ©2020
ISBN	9781523154043 1523154047 9783110538151 3110538156 9783110537826 3110537826
Descrizione fisica	1 online resource (196 pages) : color illustrations
Disciplina	662.88
Soggetti	Waste products as fuel Biomass conversion Biomass energy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Frontmatter -- Preface -- Acknowledgments -- Contents -- List of contributing authors -- 1. Furfural derivatives from agricultural and agri-food wastes by heterogeneous catalysis -- 2. Biorefinery approach for the utilization of dairy by-products and lignocellulosic biomass to lactic acid -- 3. Biomass and biowastes: renewable resources for biodegradable materials in advanced applications -- 4. Supported metal catalysts for the sustainable upgrading of renewable biomass to value-added fine chemicals and fuels -- 5. State-of-the-art in biomass fast pyrolysis using acidic catalysts: direct comparison between microporous zeolites, mesoporous aluminosilicates and hierarchical zeolites -- 6. Advances in the application of transition metal phosphide catalysts for hydrodeoxygenation reactions of bio-oil from biomass pyrolysis -- 7. Bio-waste and petroleum fractions coprocessing to fuels -- Backmatter -- Index

Sommario/riassunto

Valorization of biomass focuses on the transformation of biomass molecules into substitutes for petroleum-based chemicals that can be reused. Valorizing Biomass and Biowaste discusses the chemistry and composition of alternative biomass sources. Later chapters will introduce new markets and discuss efficient, green methods of process intensification and catalysis in order to increase conversion of biomass/biowastes.
