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Nota di contenuto	From the Contents: Feedstock: General -- Agriculture residues -- Designing the perfect plant feedstock for biofuel production -- Nonbiological pretreatment of lignocellulosic biomass -- Biological pretreatment of lignocellulosic biomass -- Saccharification -- Saccharification of lignocellulosic biomass for biofuel and biorefinery applications -- Solid acid mediated hydrolysis of biomass for producing biofuels -- Microalgae -- Cultivation of Microalgae -- Microalgae Harvest -- Recent Advances in Biofuel Production -- Recent Developments in fermentative Bio-Hydrogen Production -- Progress in photosynthetic bio-hydrogen production -- Progress in the production of platform chemicals in biorefinery -- Recent development in bioproduction and application of 3-HP -- Essential Technologies for

	Biorefinery.
Sommario/riassunto	This handbook provides a comprehensive review of the latest scientific developments through authoritative, expertly validated overviews in this field. It covers the basic principles, upfront research accomplishments as well as successful industrial applications. Each chapter is written by a domain expert which besides the in-depth review of the topic also outlines an economic outlook and future directions of research of the area. The book is structured in a way that is appropriate for advanced graduate students and professionals in diverse scientific and engineering communities including biocatalysis, genetic engineering, metabolic engineering, and bioprocess technology.