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Titolo	Utilising Biomass in Biotechnology : A Circular Approach discussing the Pretreatment of Biomass, its Applications and Economic Considerations / / by Helen Treichel, Gislaine Fongaro, Thamarys Scapini, Aline Frumi Camargo, Fábio Spitza Stefanski, Bruno Venturin
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Soggetti	Renewable energy sources Biotechnology Refuse and refuse disposal Chemistry, Technical Environmental engineering Bioremediation Renewable Energy Chemical Bioengineering Waste Management/Waste Technology Industrial Chemistry Environmental Engineering/Biotechnology
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Nota di contenuto	Circular Economy Based on Residues Valoration -- Residual Biomass Pre-treatments Methods -- Pre-treatments By-products and Inhibitors -- Biotechnological Applications of Pre-treated Biomass -- Advances and Tendencies on Biomaterial Engineering Approach.
Sommario/riassunto	This book addresses the developing area of biomass for technological applications. Written by leading researchers in the field, the book differs from other literature available by providing a detailed, in-depth discussion of the characteristics of these materials. The use of biomass for technological applications is a rapidly growing area in materials

engineering and green bioprocesses. In this approach, pre-treatments focus on the bioavailability of nutrients and facilitate the use of biomass for delivering byproducts (e.g. enzymes) and for bioenergy production, both of which are discussed at length in this book. In this regard, it explores various aspects of the structural complexity of residual biomass produced by agricultural, industrial and livestock activities for biotechnological purposes, and assesses both conventional and emerging pre-treatments (e.g. biological, enzymatic and physical–chemical). This book reveals the advantages of these techniques,both individually and in combination, making it an excellent resource for all readers interested in cutting-edge applications of biomass.