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Properties; 12 Starch-Based Sustainable Materials; 13 The Potential of Xylans as Biomaterial Resources; 14 Micro- and Nanoparticles from Hemicelluloses; 15 Nonxylan Hemicelluloses as a Source of Renewable Materials; Index

Sommario/riassunto

This book is an archival reference for the evolving field of biomaterials and their applications in society, focusing on their composition, properties, characterization, chemistry and applications in bioenergy, chemicals, and novel materials and biomaterials. It has broad appeal due to the recent heightened awareness around bioenergy and biomass as potential replacements for petroleum feedstocks. The book is divided into three parts: cellulose-based biomaterials, chitin and chitosan biomaterials, and hemicelluloses and other polysaccharides. Each chapter addresses a separate biomaterial, di
