Record Nr. UNINA9910337934803321 Autore Thomas Merin Sara Titolo Starch, Chitin and Chitosan Based Composites and Nanocomposites // by Merin Sara Thomas, Rekha Rose Koshy, Siji K. Mary, Sabu Thomas, Laly A. Pothan Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2019 3-030-03158-6 ISBN Edizione [1st ed. 2019.] 1 online resource (IX, 57 p. 27 illus., 14 illus. in color.) Descrizione fisica Collana Biobased Polymers, , 2510-3407 Disciplina 541.2254 620.115 Soggetti **Polymers Biomaterials** Nanotechnology Pharmaceutical technology Sustainable development **Polymer Sciences** Pharmaceutical Sciences/Technology Sustainable Development Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction -- Processing Techniques -- Properties of composites --Nota di contenuto Applications of polysaccharide based composites -- Conclusion --References. This brief explores recent progress in the area of polysaccharides and Sommario/riassunto their composites and nanocomposites. It is a complete resource for the evolving field of polysaccharide based biomaterials and their applications in different fields. The volume focuses on their composition, properties, characterization, chemistry and applications and also highlights recent developments in polysaccharide based composites and nanocomposites spurred by advances in polymer technology and biotechnology. Divided into different sections featuring alginates, carrageenans, cellulose, starch, chitin, chitosan, gums, etc,

each chapter presents chemical, physical, and biological attributes, and

reviews the recent research performed such as drug carriers, selective water absorption materials from oil-water emulsions, purification of water, biomedical applications, etc. The authors hope that this brief will help to inspire scientists towards novel sources for chemicals, materials, and energy in the years to come.