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Sommario/riassunto

Polysaccharide nanocrystals can be derived from the renewable resources cellulose, chitin or starch, which makes them ideal candidates for ""Green Materials Science"". This versatile material class can be used in nanocomposites such as rubber or polyester, and in functional materials such as drug carriers, bio-inspired mechanically adaptive materials or membranes. Moreover, polysaccharide-based nanomaterials are environmentally friendly due to their intrinsic biodegradability.With its interdisciplinary approach the book gives a thorough introduction to extraction, structure, properties, surfac