

1. Record Nr.	UNINA9910557618003321
Autore	Vilela Carla
Titolo	Advanced Nanocellulose-Based Materials: Production, Properties and Applications
Pubbl/distr/stampa	Basel, : MDPI - Multidisciplinary Digital Publishing Institute, 2022
Descrizione fisica	1 electronic resource (166 p.)
Soggetti	Technology: general issues
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	<p>Bacterial nanocellulose (BNC), cellulose nanocrystals (CNCs), and cellulose nanofibers (CNFs) are three nanometric forms of the most abundant natural polymer (viz. cellulose), and are currently under the spotlight in numerous fields of modern science and technology. The eco-friendly connotations, peculiar features, and multiple functionalities of these nanoscale cellulosic substrates are being explored to engineer advanced nanocomposites and nanohybrid materials for application in manifold domains, such as mechanics, optics, electronics, energy, environment, biology, and medicine. The aim of this Special Issue titled "Advanced Nanocellulose-Based Materials: Production, Properties, and Applications" is to gather original research and review contributions from the world-leading scientists working with nanocellulose. Thus, research that is representative of the current developments dealing with the production methodologies, properties, and applications of nanocellulose-based materials (e.g., nanocomposites, hybrids, aerogels, hydrogels, films, and fibers) are presented in the Special Issue.</p>