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Stanislaw Bielecki. [et al.] -- 9. Bacterial nanocellulose hydrogels designed as bioartificial medical implants / Dieter Klemm. [et al.] -- 10. Bacterial nanocellulose biomaterials with controlled architecture for tissue engineering scaffolds and customizable implants / Paul Gatenholm. [et al.] -- 11. Biomimetic mineralization of apatite on bacterial cellulose / Thi Thi Nge and Junji Sugiyam -- 12. Bacterial nanocellulose as a structured platform for conductive biopolymers / Fernando Dourado. [et al.].

Sommario/riassunto

The first book dedicated to the potential applications and unique properties of bacterial cellulose (BC), this seminal work covers the basic science, technology, and economic impact of this bulk chemical as well as the companies and patents that are driving the field. It reviews the biosynthesis and properties of BC, including genetics and characterization; discusses the advancing technology as it relates to product development, bioreactors, and production; and analyzes the economic impact of BC on a diverse range of industry applications, including materials and biomaterials, biological and polymer sciences, and electromechanical engineering--Provided by publisher.