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Sommario/riassunto

This book explores the cutting-edge applications of nanocellulose, a biopolymer, in biomedical fields. Edited by Mainak Mukhopadhyay and Debalina Bhattacharya, it covers the structure, extraction, and surface modification of nanocellulose, emphasizing its use in polymeric composites and biomedical applications. The work delves into the preparation and properties of cellulose nanofibers and nanocrystals, as well as bacterial nanocellulose synthesis. Key topics include tissue engineering, wound dressings, and drug delivery systems. Aimed at researchers and professionals in bioscience and materials engineering, the book highlights both the potential and challenges of nanocellulose in advancing medical technologies.

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Sommario/riassunto	This book provides a comprehensive guide to molecular simulations, focusing on their theoretical foundations and practical applications. Covering topics such as classical mechanics, quantum mechanics, statistical mechanics, probability theory, and computational techniques, it delves into the methodologies used for simulating molecular and atomic interactions. The text discusses numerical algorithms, force fields, simulation dynamics, and applications in areas like thermodynamics, structural properties, and transport coefficients. Intended for researchers, students, and professionals in chemistry, physics, and materials science, the book aims to bridge the gap between fundamental principles and advanced simulation practices through detailed explanations and practical examples.