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Sommario/riassunto

This book explores the intersection of biomimicry and material science, focusing on how natural structures and processes inspire innovative applications in various fields. It covers topics such as biomimetic optics, material-cell interactions, and bacteriocins as antimicrobial agents. The text also delves into the use of polydopamine in biomedicine, the development of electroactive polymer actuators, and the potential of bioinspired hydrogels through 3D bioprinting. Additionally, it discusses the role of biomimicry in sustainable textile production and plant disease detection. The book is intended for researchers, engineers, and students interested in biomimicry and its practical applications in technology and biomedicine.
