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Nota di contenuto	Chapter 1. Introduction -- Chapter 2 Materials, methodology and characterisation techniques -- Chapter 3 PVA/BC bionancomposite films with particle size effect -- Chapter 4 PVA bionanocomposite films with different particle shapes and structures -- Chapter 5 3D interphase of PVA bionanocomposite films -- Chapter 6 Micromechanical modelling of PVA bionanocomposite films.
Sommario/riassunto	This book highlights a novel and holistic approach to multiscaled PVA bionanocomposite films used for electrical sensing, medical and packaging applications. With a combination of material characterization and modeling to understand the effect of nanoparticle size and shape,

as well as 3D interphase properties and features such as interphase modulus and nanoscale dimensions, this book substantiates how excellent mechanical and thermal properties of these materials are achieved. Also it addresses the importance of using economical and ecofriendly bionanocomposites as potential green materials to support the goal of environmental sustainability with multifunctional properties.