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Sommario/riassunto

This book explores the integration of MXenes, a class of two-dimensional materials, into polymer composites, focusing on their synthesis, fabrication methods, properties, and applications. Edited by a team of international experts, it provides a comprehensive overview of the fundamental properties of MXenes, including their electronic, magnetic, and thermal characteristics. The book discusses various synthesis methods such as chemical exfoliation and delamination, and delves into surface modification strategies to enhance their properties. It also covers the application of MXene-polymer composites in energy storage, biomedical fields, electronic devices, and electromagnetic interference shielding. The intended audience includes researchers, engineers, and professionals in materials science and polymer engineering fields, aiming to understand the latest advancements in MXene technology and their practical applications.
