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Descrizione fisica	1 online resource (264 pages)
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Sommario/riassunto	<p>Nanocomposites are one of the major advances in the field of materials. They have applications in sectors as varied as aeronautics, energy and the environment. However, the effective use of nanocomposites requires new knowledge and tools in order to overcome the difficulties and benefit from the advantages.</p> <p>Nanocomposites presents recent academic and industrial progress in this field, as well as the latest research on the effective use of nanoscale fillers and reinforcements to improve the performance of advanced nanocomposites. It also describes the techniques and tools used to prepare nanocomposites, including the latest techniques for synthesis and surface treatment of nanofillers for different applications. Finally, it details the role of nanoscience in the design, characterization and multi-scale modeling of these materials, with a focus on nanoscale phenomena.</p>