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Titolo	Nanomaterials: The Building Blocks of Modern Technology : Synthesis, Properties and Applications / / edited by Tabrej Khan, Mohammad Jawaid, Kamarul Arifin Ahmad, Balbir Singh
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Descrizione fisica	1 online resource (310 pages)
Collana	Smart Nanomaterials Technology, , 3004-8281
Disciplina	620.115
Soggetti	Nanotechnology Nanoscience Nanochemistry Nanophysics
Lingua di pubblicazione	Inglese
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Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Part A: Soft Nanomaterials -- Material Synthesis of soft nanomaterials, their properties and characterization -- Fabrication Process of soft nanomaterials -- Applications of soft nanomaterials -- Part B: Biological Nanomaterials -- Introduction including class of all biological nanomaterials and their development -- Biological nanomaterial synthesis, their properties and characterization -- Fabrication Process of biological nanomaterials -- Advanced nanomaterials for biological and medicine applications -- Part C: Composite Nanomaterials -- Introduction to composite nanomaterials and their development -- The novel properties of composite nanomaterials like quantum effects, synthesis and characterization -- Fabrication Process of composite nanomaterials -- Applications of composite nanomaterials in Aerospace, Automotive, Biomedical -- Part D: Green Nanomaterials -- Introduction including class of all soft nanomaterials and their development -- Synthesis methods of Green nanomaterials, their properties and characterization -- Fabrication Process of Green Nanomaterials -- Applications of Green nanomaterials in biomedical, biotechnology, agriculture -- Part E: Future of nanomaterials.
Sommario/riassunto	This book provides a general overview of different classes of

nanomaterials, which includes the synthesis, fabrication, characterization, properties and technological applications of these materials. The book covers 4 main types of nanomaterials, namely: A) soft nanomaterials, B) biological nanomaterials, C) composite nanomaterials and D) green nanomaterials, where for each nanomaterials, a complete guide to material synthesis, characterization, their unique properties (as compared to a conventional bulk material) and potential technological applications is presented. One of the book's most notable characteristics is the inclusion of a section, a special focus on the future of nanomaterials for next-generation technology in electronic, power and energy devices. The content of this book is presented in a simple and lucid style which can also be used by professionals, scientists and students who are interested in the general research area of nanomaterials technology.
