

1. Record Nr.	UNINA9910787837803321
Titolo	Nanomaterials and nanotechnology for composites : design, simulation, and applications // edited by A.K. Haghi, PhD, Sabu Thomas, PhD, Ali Pourhashemi, PhD, Abbas Hamrang, PhD, and Ewa Klodzinska, PhD
Pubbl/distr/stampa	Boca Raton, Florida : , : CRC Press, , [2015] ©2015
ISBN	0-429-17205-2 1-4822-6387-4
Descrizione fisica	1 online resource (443 p.)
Disciplina	620.118
Soggetti	Nanocomposites (Materials) Nanoparticles Nanotechnology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Cover; About the Editors; Contents; List of Contributors; List of Abbreviations; List of Symbols; Preface; Chapter 1: Influence of a Strong Electric Field on the Electrical, Transport and Diffusion Properties of Carbon Nanostructures with Point Defects Structure; Chapter 2: Carbon-Polymer Nanocomposites with Polyethylene as a Binder: A Research Note; Chapter 3: Application of Polymers Containing Silicon Nanoparticles as Effective UV Protectors; Chapter 4: Dynamically Vulcanized Thermoelastoplastics Based on Butadiene-Acrylonitrile Rubber and Polypropylene Modified Nanofiller Chapter 5: Sorption-Active Carbon-Polymer Nanocomposites: A Research NoteChapter 6: Modification of Physical and Mechanical Properties of Fiber Reinforced Concrete Using Nanoparticles; Chapter 7: UV-Protective Nanocomposites Films Based on Polyethylene; Chapter 8: Nanocomposite Foils Based on Silicate Precursor with Surface-Active Compounds: A Research Note; Chapter 9: Experimental Investigation on the Effects of Nano Clay on Mechanical Properties of Aged Asphalt Mixture; Chapter 10: Nanostructural Elements and the Molecular Mechanics and Dynamics Interactions: A Systematic Study

Chapter 11: A Study on Biological Application of Ag and Co/Ag Nanoparticles Cytotoxicity and GenotoxicityChapter 12: The Transfer Variants of Metal/Carbon Nanocomposites Influence on Liquid Media: A Research Note; Chapter 13: Analysis of the Metal/Carbon Nanocomposites Surface Energy: A Research Note; Chapter 14: Nanopolymer Fibers: A very Comprehensive Review in Axial and Coaxial Electrospinning Process; Chapter 15: A Study on Polymer/Organoclay Nanocomposites; Chapter 16: A Very Detailed Review on Application of Nanofibers in Energy and Environmental

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#### Sommario/riassunto

Engineered nanopolymer and nanoparticles, with their extraordinary mechanical and unique electronic properties, have garnered much attention in recent years. With a broad range of potential applications, including nanoelectronics, composites, chemical sensors, biosensors, microscopy, nanoelectromechanical systems, and many more, the scientific community is more motivated than ever to move beyond basic properties and explore the real issues associated with carbon nanotube-based applications. Engineered nanopolymer and nanoparticles are exceptionally interesting from a fundamental research point

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