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Titolo	Handbook of Nanomaterials Properties // edited by Bharat Bhushan, Dan Luo, Scott R. Schricker, Wolfgang Sigmund, Stefan Zauscher
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Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (1467 p.)
Disciplina	541.2 620.1/15 620.11 620.5
Soggetti	Nanotechnology Nanoscience Nanostructures Nanotechnology Nanoscale Science and Technology Handbooks and manuals.
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	Properties of Carbon Nanotubes -- Electronic properties of Si and Ge pure and core-shell nanowires from first principle study -- Compositionally Graded III-nitride Nanowire Heterostructures: Growth, Characterization, and Applications -- Mechanical Characterization of Graphene -- Nanostructured ZnO materials: synthesis, properties and applications -- Nanosized gold and silver spherical, spiky and multi-branched particles -- Magnetite and other Fe-oxide nanoparticles -- Hierarchical Self-assembled Peptide Nano-ensembles -- Nanostructure Formation in Hydrogels -- Nanomanipulation and nanotribology of nanoparticles and nanotubes using atomic force microscopy -- Fabrication, properties and applications of gold nanopillars -- Stabilization and characterization of iron oxide superparamagnetic core-shell nanoparticles for biomedical applications -- Bio-inorganic nanomaterials for biomedical applications (Bio-silica and

Polyphosphate) -- Lipids as biological materials for nanoparticulate delivery -- Magnetic nanoparticles for biomedical applications -- Mechanical Properties of Nanostructured Metals -- Properties of Diamond Nanomaterials -- Sensing the mechanical properties of supported micro- to nano- elastic films -- Metal structures as advanced materials in Nanotechnology -- Metal oxide nanocrystals and their properties for application in solar cells.

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#### Sommario/riassunto

Nanomaterials attract tremendous attention in recent researches. Although extensive research has been done in this field it still lacks a comprehensive reference work that presents data on properties of different Nanomaterials. This Handbook of Nanomaterials Properties will be the first single reference work that brings together the various properties with wide breadth and scope.

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