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Titolo	Synthesis and applications of nanocarbons // edited by Jean-Charles Arnault, Dominik Eder
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ISBN	1-119-42944-7 1-119-42939-0 1-119-42941-2
Edizione	[First edition.]
Descrizione fisica	1 online resource (xvi, 297 pages) : illustrations (chiefly colour)
Collana	Nanocarbon chemistry and interfaces
Disciplina	620.115
Soggetti	Nanostructured materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Properties of carbon bulk materials: graphite and diamond / Kamatchi Jothramalingam Sankaran, Ken Haenen -- Endohedral and exohedral single-layered fullerenes / Diana M. Bobrowska, Marta E. Plonska-Brzezinska -- Spherical onion-like carbons / Diana M. Bobrowska, Marta E. Plonska-Brzezinska -- Carbon nanotubes: synthesis, properties, and new developments in reearch / Marianna V. kharlamova, Dominik Eder -- CNT fiber-based hybrids: synthesis, characterization, and applications in energy management / Moumita Rana [and 3 others] -- Advanced materials designed with nanodiamonds: synthesis and applications / Jean-Charles Arnault -- Chemical functionalization of nanodiamond for nanobiomedicine / Naoki Komatsu -- Nanocarbon aerogels and aerographite / Hubert Beisch, Bodo Feidler -- Optpelectronic properties of nanocarbons ans nanocarbon films / Cameron J. Shearer, LePing Yu, Joseph G. Shapter.
Sommario/riassunto	"This book will discuss the synthesis, properties, characterization and applications of various different nanocarbons including nanodiamonds, nanotubes, graphene, fullerenes, and carbon dots. It will also introduce new types of nanocarbon hybrids, promising next-generation functional materials for environmental and sustainable energy applications, for example nanodiamond-metal, nanodiamond-

inorganic and nanodiamond-graphene hybrids. The book provides a transversal view of assets and applications of the different carbon nanomaterials and their hybrids, helping to share knowledge between each community of carbon materials"--

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