1. Record Nr. UNINA9910337927703321

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Titolo	Carbon Allotropes: Metal-Complex Chemistry, Properties and Applications / / by Boris Ildusovich Kharisov, Oxana Vasilievna Kharissova
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-03505-0
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (798 pages)
Disciplina	620.193 546.6812
Soggetti	Nanotechnology Organic chemistry Ceramics Glass Composites (Materials) Composite materials Organic Chemistry Ceramics, Glass, Composites, Natural Materials
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. General data on carbon allotropes -- Chapter 2. Conventional carbon allotropes -- Chapter 3.Classic carbon nanostructures -- Chapter 4.Less-common carbon nanostructures -- Chapter 5. Other existing carbon forms -- Chapter 6. Predicted carbon forms -- Chapter 7.Coordination/organometallic compounds and composites of carbon allotropes -- Chapter 8. Solubilization and dispersion of carbon allotropes and their metal-complex composites -- Chapter 9.Carbon allotropes in the environment and their toxicity -- Chapter 10. Applications and cost-benefit data -- Chapter 11. Student zone: Overview, training, practices and exercises -- Chapter 12. Conclusions and further outlook.
Sommario/riassunto	This book provides a detailed description of metal-complex functionalized carbon allotrope forms, including classic (such as

graphite), rare (such as M- or T-carbon), and nanoforms (such as carbon nanotubes, nanodiamonds, etc.). Filling a void in the nanotechnology literature, the book presents chapters generalizing the synthesis, structure, properties, and applications of all known carbon allotropes. Metal-complex composites of carbons are described, along with several examples of their preparation and characterization, soluble metal-complex carbon composites, cost-benefit data, metal complexes as precursors of carbon allotropes, and applications. A lab manual on the synthesis and characterization of carbon allotropes and their metal-complex composites is included. Provides a complete description of all carbon allotropes, both classic and rare, as well as carbon nanostructures and their metal-complex composites; Contains a laboratory manual of experiments on the synthesis and characterization of metal-complex carbon composites; Discusses applications in diverse fields, such as catalysis on supporting materials, water treatment, sensors, drug delivery, and devices.