

1.	Record Nr.	UNISA990002914420203316
	Titolo	Pots and Potters : current approaches in Ceramic Archaeology / edited by Prudence M. Rice
	Pubbl/distr/stampa	Los Angeles : Institute of Archaeology, [1989]
	Descrizione fisica	255 p. : ill. ; 28 cm
	Collana	Monograph ; 24
	Disciplina	738
	Soggetti	Vasi antichi - Antichità
	Collocazione	C II f 1
	Lingua di pubblicazione	Inglese
	Formato	Materiale a stampa
	Livello bibliografico	Monografia
2.	Record Nr.	UNINA9910874673003321
	Autore	Khovavko Alexander
	Titolo	Carbon Nanostructured Materials : Synthesis, Characterization, and Industrial Applications / / by Alexander Khovavko, Eugene Strativnov, Andrii Nebesnyi, Denis Filonenko, Olexiy Sviatenko, Angela Piatova, Maksym Barabash
	Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2024
	ISBN	9783031641213 9783031641206
	Edizione	[1st ed. 2024.]
	Descrizione fisica	1 online resource (163 pages)
	Collana	SpringerBriefs in Materials, , 2192-1105
	Altri autori (Persone)	StrativnovEugene NebesnyiAndrii FilonenkoDenis SviatenkoOlexiy PiatovaAngela BarabashMaksym
	Disciplina	620.5
	Soggetti	Nanotechnology Materials Carbon Chemistry Condensed matter Surfaces (Physics)

Fluid mechanics
Mathematical models
Carbon Materials
Two-dimensional Materials
Surface and Interface and Thin Film
Engineering Fluid Dynamics
Mathematical Modeling and Industrial Mathematics

Lingua di pubblicazione

Inglese

Formato

Materiale a stampa

Livello bibliografico

Monografia

Nota di contenuto

Synthesis of Carbon Nanotubes from Products of Hydrocarbons
Conversion by CVD Method -- Design of Modern Equipment for
Synthesis of Carbon Nanomaterials -- Production Technology and
Application of Materials Based on Thermally Expanded Graphite.

Sommario/riassunto

This book provides a concise yet comprehensive look at carbon nanostructured materials, focusing on synthesis methodologies, applications, and fundamental principles. Based on extensive research conducted at the Gas Institute of the National Academy of Sciences of Ukraine, it offers a thorough examination of recent advancements in the field. The book describes various synthesis techniques, particularly emphasizing the continuous synthesis of carbon nanotubes (CNTs) on metal catalysts using chemical vapor deposition (CVD). It also discusses computational fluid dynamics (CFD) modeling of heating processes associated with carbon materials, crucial for understanding the thermodynamics of complex gas systems relevant to CNTs synthesis. Furthermore, the book discusses the structural properties of carbon nanomaterials, employing techniques such as Raman spectroscopy and optical microscopy. It provides detailed insights into the design and optimization of modern equipment for CNTs synthesis, with a focus on energy-efficient reactors for thermally expanded graphite (TEG) production. Beyond synthesis methodologies, the book explores applications of carbon nanomaterials, including their use in lithium-ion batteries, water purification systems, and nuclear reactors. It offers a serious examination of the potential environmental and technological implications of these materials. Comprising three distinct parts, each supplemented with comprehensive summaries, this book serves as a valuable resource for researchers, engineers, and graduate students in material science, thermal engineering, and nanotechnology. It presents empirical findings, theoretical insights, and practical applications, establishing itself as a valuable addition to the literature in the field of carbon nanostructured materials.