

1. Record Nr.	UNINA9910254054803321
Titolo	Carbon Nanomaterials for Biomedical Applications // edited by Mei Zhang, Rajesh R. Naik, Liming Dai
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-22861-7
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (576 p.)
Collana	Springer Series in Biomaterials Science and Engineering, , 2195-0644 ; ; 5
Disciplina	610.28
Soggetti	Biomaterials Biomedical engineering Nanochemistry Nanoscale science Nanoscience Nanostructures Nanotechnology Biomedical Engineering and Bioengineering Nanoscale Science and Technology Nanotechnology and Microengineering
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 and index.
Nota di contenuto	Part I Synthesis and characterization of carbon nanomaterials -- Part II Functionalization of carbon nanomaterials for bio-applications -- Part III Cytotoxicity and Genotoxicity of carbon nanomaterials -- Part IV Biomedical applications of carbon nanomaterials -- Part V Outlook.
Sommario/riassunto	This book covers a wide range of topics relating to carbon nanomaterials, from synthesis and functionalization to applications in advanced biomedical devices and systems. As they possess unique and attractive chemical, physical, optical, and even magnetic properties for various applications, considerable effort has been made to employ carbon nanomaterials (e.g., fullerenes, carbon nanotubes, graphene, nanodiamond) as new materials for the development of novel biomedical tools, such as diagnostic sensors, imaging agents, and

drug/gene delivery systems for both diagnostics and clinical treatment. Tremendous progress has been made and the scattered literature continues to grow rapidly. With chapters by world-renowned experts providing an overview of the state of the science as well as an understanding of the challenges that lie ahead, Carbon Nanomaterials for Biomedical Applications is essential reading not only for experienced scientists and engineers in biomedical and nanomaterials areas, but also for graduate students and advanced undergraduates in materials science and engineering, chemistry, and biology.
