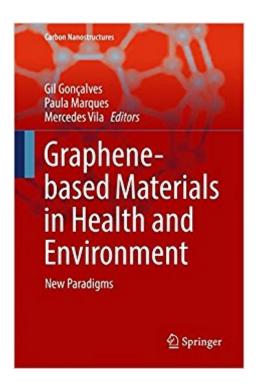


The book was found

Graphene-based Materials In Health And Environment: New Paradigms (Carbon Nanostructures)





Synopsis

This book provides a comprehensive overview of the potential use of graphene-based materials in two important societal areas: medicine and the environment. It discusses how new graphene-based materials can be creatively used for biological purposes, for example as delivery vehicles for diagnostics or therapeutics, ultrasensitive sensors, smart responsive substrates for artificial-tissue design and biomarkers. Moreover, it presents new insights into their use as sorbent or photocatalytic materials for environmental decontamination in water and gas-phase desalination membranes and as sensors for contaminant monitoring, giving relevance to the current discussions on the possible toxicological effects of graphene-based materials.

Book Information

Series: Carbon Nanostructures

Hardcover: 356 pages

Publisher: Springer; 1st ed. 2016 edition (December 12, 2016)

Language: English

ISBN-10: 3319456377

ISBN-13: 978-3319456379

Product Dimensions: 6.1 x 0.8 x 9.2 inches

Shipping Weight: 1.5 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #757,736 in Books (See Top 100 in Books) #128 in Books > Science & Math > Technology > Nanotechnology #208 in Books > Science & Math > Nature & Ecology > Water

Supply & Land Use #271 in Books > Engineering & Transportation > Engineering >

Bioengineering > Biomedical Engineering

Customer Reviews

This book provides a comprehensive overview of the potential use of graphene-based materials in two important societal areas: medicine and the environment. It discusses how new graphene-based materials can be creatively used for biological purposes, for example as delivery vehicles for diagnostics or therapeutics, ultrasensitive sensors, smart responsive substrates for artificial-tissue design and biomarkers. Moreover, it presents new insights into their use as sorbent or photocatalytic materials for environmental decontamination in water and gas-phase desalination membranes and as sensors for contaminant monitoring, giving relevance to the current discussions on the possible toxicological effects of graphene-based materials.

Gil Gon§alves graduated in 2003 in Chemistry and obtained a Masterâ ™s degree in Materials Science in 2008 from the University of Aveiro (Portugal). In 2012 he received his Ph.D in Mechanical Engineering from the Center for Mechanical Technology and Automation (TEMA) University of Aveiro (UA), where he then pursued research on the development of graphene nanocomposites for biomedical and environmental applications until 2016. After obtaining a Marie Curie research fellowship, he started working at the Institute of Material Science of Barcelona-High Council of Spanish Research (ICMAB-CSIC) on the development of ultra-sensitive nanotherapeutic anticancer agents. Currently, he is also a member of the editorial board of Nature Publishing Groupâ ™s Scientific Reports in the field of chemical physics. Mercedes Vila is currently the scientific director of Coating Technologies S.L. and guest assistant professor at the University of Aveiroâ ™s Mechanical Engineering Department TEMA Research Unit. Her main research interests focus on the surface modification and functionalization of materials and materials behavior under different environments, e.g. biomaterials a "cell interactions under physical stimuli, tribological responses and environmental remediation. Paula Margues is a principal investigator in the Nanoengineering Group of TEMA research unit at the University of Aveiro. Paulaâ ™s research interests are related to the engineering and development of new, nanostructured materials that may offer solutions to societal problems. She started working with carbon nanostructures in 2007, and has been exploring the potential of graphene oxide for health and environmental applications since 2010, with the aim of engineering solutions that foster a cleaner, healthier, safer and more sustainable world.

Download to continue reading...

Graphene-based Materials in Health and Environment: New Paradigms (Carbon Nanostructures)
Carbon Nanotube and Graphene Device Physics 21st Century Guide to Carbon Sequestration Capture and Storage to Fight Global Warming and Control Greenhouse Gases, Carbon Dioxide,
Coal Power, Technology Roadmap and Program Plan Returning Carbon to Nature: Coal, Carbon
Capture, and Storage Rodd's Chemistry of Carbon Compounds, Part D: Membered Heterocyclic
Compounds With More Than 2 Heteroatoms in the Ring (Rodd's Chemistry of Carbon Compounds
2nd Edition) Human Behavior and the Social Environment: Shifting Paradigms in Essential
Knowledge for Social Work Practice (6th Edition) (Connecting Core Competencies) Nanostructures
and Nanomaterials: Synthesis, Properties, and Applications (2nd Edition) (World Scientific Series in
Nanoscience and Nanotechnology) Photophysics of Carbon Nanotubes Interfaced with Organic and
Inorganic Materials Ultraviolet nanoimprint lithography: Fabrication of ordered nanostructures,

integrated optics and electronic devices Nanostructures and Nanotechnology Carbon Fibre from Lignin (SpringerBriefs in Materials) Quantum Mechanics for Nanostructures Nanostructures & Nanomaterials: Synthesis, Properties & Applications New Paradigms in Lyme Disease Treatment: 10 Top Doctors Reveal Healing Strategies That Work Health Communication: From Theory to Practice (J-B Public Health/Health Services Text) - Key words: health communication, public health, health behavior, behavior change communications The Wired Museum: Emerging Technology and Changing Paradigms Designing Distributed Systems: Patterns and Paradigms for Scalable, Reliable Services Shifting Paradigms in Contemporary Ceramics: The Garth Clark and Mark Del Vecchio Collection Tripping over the Truth: How the Metabolic Theory of Cancer Is Overturning One of Medicine's Most Entrenched Paradigms Paradigms: The Business of Discovering the Future

Contact Us

DMCA

Privacy

FAQ & Help