

1. Record Nr.	UNISA996490350303316
Titolo	Advanced nanomaterials / / edited by Shadia Jamil Ikhmayies
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2022] ©2022
ISBN	9783031119965 9783031119958
Descrizione fisica	1 online resource (589 pages)
Collana	Advances in Material Research and Technology
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	Intro -- Preface -- Contents -- Optical Sources and Waveguides Based on Flexible 1D Nanomaterials -- 1 Introduction -- 2 Methods -- 3 Nanoscale Waveguides -- 4 Multimode Lasers -- 5 Conclusion -- References -- Recent Advances in Earth Abundant and Environmentally Green Semiconducting Chalcogenide Nanomaterials for Photovoltaics Applications -- 1 Introduction -- 2 Chalcogenides Semiconductors -- 2.1 Iron Disulfide -- 2.2 Copper Sulfide -- 2.3 Tin Sulfide (SnS) -- 2.4 Copper Zinc Tin Sulfide (CZTS) -- 3 Other Green Semiconducting Materials -- 4 Summary -- References -- Effect of Spatial Scale on the Value of the Surface Energy of a Solid -- 1 Introduction -- 2 Surface Energy -- 3 Materials and Grafting -- 3.1 Particles -- 3.2 Flat Surfaces -- 3.3 Flat Surfaces Obtained by Particles Compression -- 4 Methods Used to Measure the Surface Energy -- 4.1 Capillary Rise -- 4.2 Inverse Gas Chromatography at Infinite Dilution -- 4.3 Contact Angle Measurements -- 4.4 Atomic Force Microscopy (AFM) -- 5 Results -- 5.1 Capillary Rise Experiments -- 5.2 Inverse Gas Chromatography at Infinite Dilution -- 5.3 Wettability: Contact Angle on Silica Wafers -- 5.4 Atomic Force Microscopy (AFM) -- 5.5 Contact Angles on Flat Surfaces Obtained by Particles Compression -- 6 Discussions -- 7 Conclusions -- References -- The Thermal Decomposition of AP and HMX: Effect of Reducing Size and Incorporation of Nano Additives -- 1 Introduction -- 2 Methods

for Preparing Nanosize HEMs -- 2.1 Preparation of Nano AP and Its Thermal Decomposition -- 2.2 Preparation of Nano HMX and Its Thermal Decomposition -- 3 Nanocatalyst for Thermal Decomposition -- 3.1 Nanometals and Nanoalloys -- 3.2 Nanoferrites -- 3.3 Nano Metal Oxides -- 3.4 Nanocomposites -- 4 Conclusions -- References

-- Advanced Carbon Nanomaterials as Adsorbents -- 1 Introduction. 2 Carbon Nanomaterials: Structure and Adsorption Properties -- 2.1 Fullerenes -- 2.2 Carbon Nanotubes -- 2.3 Carbon Nanofibers -- 2.4 Graphene and its Derivations -- 3 Adsorption Influential Factors -- 4 Future Perspectives and Commercialization -- 5 Conclusions -- References -- Graphene Oxide-Based Advanced Nanomaterials for Environmental Remediation Applications -- 1 Introduction -- 2 Physicochemical Properties of Graphene-Based Nanomaterials -- 3 Preparation of Graphene Oxide -- 3.1 Synthesis of Pristine GO -- 3.2 Synthesis of Reduced GO (rGO) -- 4 Functionalization and Modification of GO -- 4.1 Covalent Functionalization of GO -- 4.2 Non-covalent Functionalization of GO -- 5 Application to Sustainable Water Purification -- 5.1 Heavy Metal Removal -- 5.2 Removal of Dye -- 5.3 Agricultural Pollutants Removal -- 5.4 Radioactive Ions Removal -- 5.5 Removal of Drugs -- 5.6 Adsorption Mechanism -- 6 Toxicology of Graphene Oxide -- 7 Conclusion and Future Prospective -- References -- Carbon Spheres and Carbon Soot for Tribological Applications -- 1 Introduction -- 2 Tribological Problems -- 3 Oil-Based Lubricants -- 4 Nanomaterials in Tribology -- 4.1 Metal-Based Additives -- 4.2 Carbon-Based Additives -- 5 Carbon Spheres and Carbon Soot -- 5.1 Tribological Applications of Carbon Spheres -- 5.2 Tribological Applications of Carbon Soot -- 5.3 Other Applications of CSPs and CS -- 6 Summary and Future Scope -- References -- Lanthanide-Based Oxide as Advanced Nanostructured Materials for Removal of Organic Pollution -- 1 Introduction -- 2 Synthetic Methods for the Production of Lanthanide-Based Nanostructure -- 2.1 Solid-State Reaction -- 2.2 Hydrothermal -- 2.3 Combustion -- 2.4 Precipitation -- 2.5 Pechini Approach -- 2.6 Sol-gel Method -- 2.7 Chemical Vapor Deposition (CVD) -- 3 Applications of Lanthanide-Based Oxide Nanostructures. 3.1 An Introduction to Photocatalytic Nanostructure -- 3.2 Photocatalytic Degradation of Organic Pollutant -- 4 Conclusions -- References -- Advanced Functional Nanomaterials for Sensing of Pollutants and Water Remediation -- 1 Introduction -- 2 Functionalization of Nanomaterials -- 2.1 Classification and Synthesis of Functionalized Nanomaterials -- 2.2 Characterization of the Functionalized Nanomaterials -- 3 Sensing Properties and Applications of Functionalized Nanomaterials -- 3.1 Chemical Sensing -- 3.2 Bio-Sensing -- 3.3 Food Adulterant Sensing -- 3.4 Environmental Contaminant Sensing -- 4 Advanced Functionalized Nanomaterials for Sensing -- 4.1 Carbon-Based Functionalized Nanomaterials -- 4.2 Silica Nanoparticles -- 4.3 Noble Metal Nanoparticles -- 4.4 Magnetic Nanoparticles (MNPs) -- 4.5 Quantum Dots (QDs) -- 4.6 Miscellaneous Nanomaterials -- 5 Advanced Functional Nanomaterials and Water Remediation -- 5.1 Removal of Heavy Metal Ions from Water -- 5.2 Removal of Dyes from Water -- 5.3 Removal of Organic Pollutants from Water -- 5.4 Catalytic Degradation of Organic Pollutants -- 6 Conclusions and Future Prospects -- References -- Fabrication, Photoluminescence, and Applications of Rare-Earth Ions-Activated Nanophosphors -- 1 Introduction -- 1.1 Phosphors and Rare-Earth (RE) Ions-Activated Phosphors -- 1.2 Luminescence Behaviors -- 1.3 Some Recent Applications Based on RE Ions-Activated Phosphors -- 1.4

Nanophosphors (NPs) -- 2 Preparation of NPs in Wide Applications --
 2.1 Phosphor-Converted White Light-Emitting Diodes (pc-WLEDs) --
 2.2 Optical Nanothermometry -- 2.3 Latent Fingerprint Detections --
 2.4 Anti-Counterfeiting -- 2.5 Field Emission Displays -- 2.6 Biological
 Application (Bio Labeling and Drug Delivery) -- 3 Conclusion
 and Outlook -- References.
 Recent Strategies and Developments of ZnS Nanomaterials
 as Photocatalysts and Electrocatalysts -- 1 Introduction -- 2
 Nanoscience -- 3 Nanotechnology -- 4 Zinc Sulphide (ZnS) -- 4.1
 Crystal Structure of ZnS -- 5 Various Applications of ZnS Nanomaterials
 -- 5.1 Growth and Applications Dependence of Nanostructures
 on the Various Parameters -- 6 Role of ZnS Nanostructure in Catalysis
 -- 6.1 Catalytic Activities -- 7 Various Efforts to Improve the Catalytic
 Effect of ZnS -- 7.1 Effects of Doping -- 7.2 Effects of Defects States
 -- 7.3 Effects of Porosity -- 7.4 Effects of Morphology -- 8
 Conclusions and Future Perspectives -- References --
 Nano/Microstructures of Nickel Sulphide for Energy Storage
 and Conversion Devices -- 1 Introduction -- 1.1 What Are
 Nanomaterials? -- 1.2 Why Metal Sulphides? -- 1.3 What is Nickel
 Sulphide? -- 2 Role of Nano/Microstructure of Nickel Sulphide
 in Energy Storage and Conversion Devices -- 2.1 Dye Sensitized Solar
 Cell (DSSC) -- 2.2 Supercapacitor and Lithium Ion Batteries -- 3
 Various Parameters Which Affect the Properties of Nickel Sulphide -- 4
 Different Phases of Nickel Sulphide -- 4.1 NiS -- 4.2 Vaesite (NiS₂) --
 4.3 Heazlewoodite (Ni₃S₂) -- 4.4 Polydymite (Ni₃S₄) -- 4.5 Godlevskite
 (Ni₉S₈) -- 5 Conclusions and Future Perspectives -- References --
 Nanomaterials for Concrete Coating Applications -- 1 Introduction -- 2
 Concrete Durability -- 3 Coating Technology in Concrete -- 4
 Nanotechnology -- 5 Nanoparticles -- 6 Definition of Nanotechnology
 in Concrete -- 7 Nanomaterials-Based Concretes -- 8 Production
 of Nano Concrete -- 9 Polymer Nanocomposite Coatings -- 10 Nano
 Polymers and Their Applications -- 11 Environmental Applications --
 12 Conclusions -- References -- Use of Nanoparticles in Endodontics
 -- 1 Introduction -- 2 Instrument Modifications -- 3 Root Canal
 Disinfection -- 3.1 Irrigation Agents.
 3.2 Intracanal Medicaments -- 4 Material Modifications -- 4.1 Root
 Canal Sealer -- 4.2 Mineral Trioxide Aggregate -- 5 Tissue
 Engineering, Drug Delivery and Regeneration -- 6 Limitations of Using
 Nanoparticles -- 7 Conclusion -- References -- Nanotechnology
 Strategies to Advance Restorative Resin-Based Dental Materials -- 1
 Introduction -- 2 Replacement of Resin Composite Restorations -- 3
 Toward Caries Disease: Bioactive Agents into Resin-Based Restorative
 Materials -- 4 Historical Progress of Nanofillers Incorporated
 into Restorative Resin-Based Materials -- 5 Nanomaterials to Provide
 Bioactivity for Resin-Based Restorative Materials -- 5.1 Calcium
 Phosphate Nanoparticles -- 5.2 Calcium Fluoride Nanoparticles -- 5.3
 Halloysite Nanotubes -- 5.4 Titanium Dioxide Nanotubes -- 5.5 Boron
 Nitride Nanotubes -- 5.6 Zinc-Based Nanoparticles for Mineral
 Deposition -- 6 Nanomaterials to Impart Antibacterial Properties
 to Resin-Based Restorative Materials -- 6.1 Zinc-Based Nanoparticles
 for Antimicrobial Activity -- 6.2 Silver Nanoparticles -- 6.3 Copper
 Nanoparticles -- 6.4 Quaternary Ammonium Polyethylenimine
 Nanoparticles -- 6.5 Nanocapsules -- 6.6 Quantum Dots -- 7
 Conclusion -- References -- Recent Advances in the Design
 of Colorimetric Sensors Based on Gold Nanoparticles -- 1 Colorimetric
 Detection Based on Gold Nanoparticles -- 2 Application of Gold
 Nanoparticles to Surfactant Detection: Determination of Critical Micelle
 Concentrations of Surfactants -- 3 Gold Nanoparticles for DNA

and RNA Biomolecule Detection: Physicochemical Aspects
of the Interaction -- 4 Gold Nanoparticles in the Detection of Proteins
and Enzymes for Medical Applications -- 5 Nanotechnology-Based
Sensors for Virus Detection and Diagnosis: New Challenges in SAR-
CoV-2 Detection -- 6 Conclusions -- References.
Recent Advances and Applications of Nanomaterials in Solid-Phase
Extraction Technique.

2. Record Nr.	UNISA996387044903316
Autore	Shakespeare William <1564-1616.>
Titolo	The rape of Lucrece [[electronic resource]] : committed by Tarquin the sixt, and the remarkable judgments that befel him for it / / ... by Will. Shakespeare ... ; whereunto is annexed, The banishment of Tarquin, or, The reward of lust, by J. Quarles
Pubbl/distr/stampa	London, : Printed by J.G. for John Stafford ... and Will. Gilbertson ..., 1655
Descrizione fisica	[6], 71, [5], 12 p
Altri autori (Persone)	QuarlesJohn <1624-1665.>
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Reproduction of original in Huntington Library. "The banishment of Tarquin, or, The reward of lust" has separate t.p.
Sommario/riassunto	eebo-0113

3. Record Nr.	UNINA9910961091703321
Autore	Pezzullo John C
Titolo	Biostatistics for dummies / / by John C. Pezzullo
Pubbl/distr/stampa	Hoboken, N.J., : John Wiley & Sons, Inc., 2013
ISBN	9781118553954 1118553950
Descrizione fisica	1 online resource (411 p.)
Collana	--For dummies Biostatistics for dummies --For dummies
Disciplina	570.15195
Soggetti	Biometry
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"A Wiley brand." Includes index.
Nota di contenuto	pt. I. Beginning with biostatistics basics -- pt. II. Getting down and dirty with data -- pt. III. Comparing groups -- pt. IV. Looking for relationships with correlation and regression -- pt. V. Analyzing survival data -- pt. VI. The part of tens.
Sommario/riassunto	Score your highest in biostatistics Biostatistics is a required course for students of medicine, epidemiology, forestry, agriculture, bioinformatics, and public health. In years past this course has been mainly a graduate-level requirement; however its application is growing and course offerings at the undergraduate level are exploding. Biostatistics For Dummies is an excellent resource for those taking a course, as well as for those in need of a handy reference to this complex material. Biostatisticians-analysts of biological data-are charged with finding answers to some of the world's most