

1. Record Nr.	UNINA9910465603503321
Titolo	Multi-functional nanomaterials and their emerging applications / / edited by Alagarsamy Pandikumar, Huang Nay Ming and Rajendran Jothilakshmi
Pubbl/distr/stampa	Durnten-Zurich, Switzerland : , : Trans Tech Publications, , 2014 Durnten-Zurich, Switzerland ; ; Enfield, New Hampshire : , : distributed worldwide by Trans Tech Publications, , [date of distribution not identified] ©2014
ISBN	3-03826-448-2
Descrizione fisica	1 online resource (171 p.)
Collana	Materials Science Forum, , 1662-9752 ; ; Volume 781
Disciplina	620.5
Soggetti	Nanotechnology Quantum electronics Electronic books.
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"Special topic volume with invited peer reviewed papers only."
Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Multi-Functional Nanomaterials and their Emerging Applications; Preface; Table of Contents; Multifunctional Nanostructures: Synthesis and Applications; A Review on Application of Multifunctional Mesoporous Nanoparticles in Controlled Release of Drug Delivery; Emerging Applications of Nanoscience; Modeling and Simulation of Plasmonic Nanoparticles Using Finite-Difference Time-Domain Method: A Review; Design and Development of Ferrite Composite Film Electrode for Photoelectrochemical Energy Application Synthesis, Surface Acidity and Photocatalytic Activity of WO ₃ /TiO ₂ Nanocomposites - An Overview Chitosan Based Nanocomposite Materials as Photocatalyst - A Review; Effect of Substrate Temperature on the Structural and Electrochromic Properties of Mo Doped WO ₃ Thin Films; Electrocatalysis of Oxygen Using Platinum Nanoparticles Supported on Carbon/Conductive Bipolymeric Nanocomposite Film for Polymer Electrolyte Membrane Fuel Cells; Cadmium Zinc Sulfide Nanoparticles as Sensing Material for Microcontroller Based Ammonia

Sensor: Pilot Study

Electrochemical Impedance Spectroscopic Study of Anatase TiO₂ NanoparticleQuenching of Silver Nanoparticles; Structural, Morphological, Vibrational and Electrical Studies on Zn Doped Nanocrystalline LiNiPO₄; Structural, Electrical and Dielectric Properties of DC Reactive Magnetron Sputtered ZrO₂ Films for Metal-Oxide-Semiconductor Devices; Keywords Index; Authors Index

Sommario/riassunto

The multi-functional properties of nanomaterials offer a wide range of opportunities for addressing several research and development challenges in the area of nanoscience and nanotechnology. Multi-functional nanomaterials find wide application in a variety of sectors including agriculture, medicine, telecommunications, disaster management and environmental conservation. The focus of this special topic volume is on multifunctional nanomaterial development and their emerging applications towards commercialization. This special topic illustrates a new pathway to achieve novel practical application