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Altri autori (Persone)	ChangShun-Hsyung SohaniNagendra GuptaVijay Kumar
Disciplina	620.1
Soggetti	Materials Catalysis Force and energy Nanotechnology Ceramic materials Fuel cells Perovskite (Mineral) Materials for Energy and Catalysis Ceramics Fuel Cells Perovskites Materials Engineering
Lingua di pubblicazione	Inglese
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Livello bibliografico	Monografia
Nota di contenuto	Hybrid Electrocatalyst Based on Pt/C with Varying Mass Fraction of Platinum for PEMFC -- Testing of Membrane Electrode Assembly Components for PEM Fuel Cells -- Influence of Activation Conditions on the OER Activity of Iridium-Containing Catalysts -- The Role of Titanium Dioxide Morphology and Phase Composition in the Photocatalytic Properties -- Synthesis and Photocatalytic Properties of TiO2 – NiO Nanocomposite -- Biodegradation Behavior of Magnesium-

based Biomaterials using Surface Modification Techniques for Orthopedic Implants: A Review -- Application of Laser Ablation and Nitrogen Stabilization to Obtain Ion-plasma Diamond-like Coatings for Anti-friction Purposes -- Effect of In-doping on Structural and Optical Properties of ZnS Thin Film -- Criteria for Formation and Properties of Organic Films on Rolled Steel Surface -- Influence of Time of Adsorption Protective Film Formation on its Morphology and Physical Characteristics -- Optimization of Surface Grinding Parameters for M2 HSS Steel Using 2^3 Factorial Design -- Alternative Fuel: Bio-Charcoal Briquettes from Corn Cobs -- New Renewable Energy Sources: Recycling Plastic Waste into Synthesis Oil Fuel -- Ferroelectric Hysteresis and Switching Processes in Relaxor Type PZT Piezoceramics -- Dielectric Responses of Solid Solutions of the Binary PZT System in the Microwave Range at High Temperature -- Pyroeffect and Dispersion Behavior of the Dielectric Constant of Solid Solutions of the PbZr1-xTixO3 System in the Morphotropic Region -- Pyroelectric Properties of Ferroelectric Ceramic Materials Based on the PbZr1-xTixO3 System Obtained by Slip Casting Technology.

Sommario/riassunto

The book provides new results of internationally recognized scientific teams in the fields of Materials Science, Physics, Mechanics, Fabrication Techniques and Technologies of Advanced Materials, operating in wide scaling from nanometer to macroscopic range. The developed theoretical and experiment approaches cover prospective manufacture methods of nanomaterials, ferroelectrics, piezoelectrics (environmentally friendly) and other advanced materials and composites. The book discusses fabrication techniques, physics, mechanics, and applications of promising materials and composites. It presents numerous results of theoretical and experimental studies of novel materials and devices with beforehand given and improved structure-sensitive properties, based on the methods of biology, inorganic and organic chemistry, magnetoelectric elasticity, physics of condensed matter and material science. Thus, the book allows one to better understand the modern requirements for advanced materials and composites. The results obtained also include computational algorithms and original hard- and software, used in realization of numerical methods (in particular, finite-element modeling), demonstrating fascinating new advancements for wide spectrum of novel materials (which could be obtained due to reprocessing or using natural materials, wastes, fruits and plants) and devices. The advanced materials with specific properties and novel devices, based on them, show higher and improved properties in comparison with the properties of the competitive publications. In the result, it gives a new knowledge, which is necessary for numerous applications and subsequent development of industry and the methods of management and marketing. The original theoretical, numerical and experiment methods, manufactured devices and set-ups demonstrate significant possibilities in expanding the research of various physical processes and phenomena. They provide different improvements in the study of numerous structure-sensitive characteristics of solids and structures. The book will be useful for students, post-graduate students, scientists and engineers, which research and develop a new generation of nanomaterials and nanocomposites, ferroelectric and piezoelectric materials, other promising structures and compositions with structure-sensitive properties, and various devices, designed on their base and used in different applications of science, technique and technology. Moreover, it will be very interesting for specialists, working in industry, management and marketing. The book is important for unification and development of various expertise, designs and studies. It presents new

	research methods and scientific results in the Condensed Matter Physics, Materials Science, Physical and Mechanical Experiment, Processing Techniques and Engineering of Nanomaterials, Piezoelectrics and other Advanced Materials and Composites, Computational Methods, numerous applications and developed devices.

2.

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Titolo	Environmental entomology
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Disciplina	632.7
Soggetti	Insects - Ecology Beneficial insects Insect pests Entomology Entomologie Insectes - Ecologie Insectes utiles Insectes nuisibles entomology 42.75 insects Biologische Schädlingsbekämpfung Insecten Ecologische aspecten Periodical Periodicals.
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