

1. Record Nr.	UNINA9910791914103321
Titolo	Advanced materials for applied science and technology : selected, peer reviewed papers from the 8th International Bhurban Conference on Applied Science and Technology (IBCAST 2011), January 10-13 2011, Islamabad, Pakistan // edited by Arshad Munir and Zaffar M. Khan
Pubbl/distr/stampa	Durnten-Zurich : , : Trans Tech, , [2011] ©2011
ISBN	3-03813-639-5
Descrizione fisica	1 online resource (175 p.)
Collana	Advanced materials research, , 1022-6680 ; ; volume 326
Altri autori (Persone)	MunirArshad KhanZaffar M
Disciplina	620.11
Soggetti	Composite materials
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 indexes.
Nota di contenuto	Advanced Materials for Applied Science and Technology; Preface and Committees; Table of Contents; 1. Composites; Finite Element Analysis (FEA) of Honeycomb Sandwich Panel for Continuum Properties Evaluation and Core Height Influence on the Dynamic Behavior; Influence of Y and Nb Addition on Crystallization Behavior and Mechanical Properties of Zr-Ni-Al-Cu-M Bulk Amorphous Alloys; A Device to Measure the Shrinkage and Heat Transfers during the Curing Cycle of Thermoset Composites; Development of Parametric Model and Warping Analysis of Composite Beam with Multiple Rigid Regions Numerical Modeling and Simulation of Delamination Crack Growth in CF/Epoxy Composite Laminates under Cyclic Loading Using Cohesive Zone ModelDevelopment of Resin Infusion Process for Ultralight Large Composite Structures; Comparison of the Polymer/Composite Based on Polyurethane with Different -OH Backbone; 2. Nano Composite; Enhanced Dielectric Response in Polyurethane Based All-Organic Nanocomposite; Aging Response to Microstructure and Properties of Ferromagnetic Shape Memory Alloys; Synthesis and Characterization of Processable Polyimide Titania Nanohybrids Glass Transition Related Relaxation Dynamic in Polystyrene NanoparticlesMicrowave Augmented Fabrication and Evaluation of

CNT-Reinforced Nanohydroxyapatite; Horizontal Patterns of Single Wall Carbon Nanotubes by Simple Filtration Method; 3. Ceramics and Oxides; Microstructure and Microwave Dielectric Properties of BaTi<sub>4</sub>O<sub>9</sub> Ceramics Derived from a Sol-Gel Precursor; Solgel Self-Combustion Synthesis and Characterization of La<sub>0.8</sub>Sr<sub>0.2</sub>Mn<sub>0.8</sub>Fe<sub>0.2</sub>O<sub>3</sub>; 4. Thin Films and Surface Engineering  
Molecular Beam Epitaxy of Cu-Doped BaSi<sub>2</sub> Films on Si(111) Substrate and Evaluation & Qualification of Depth Profiles of Cu Atoms for the Formation of Efficient Solar Cells  
Wear Behaviour of HVOF Sprayed WC-Cobalt Coatings; Effect of Deposition Mechanism and Microstructure of Nano-Ceria Oxide Addition on Ni-P Coating by Pulse Electrodeposition; Co-Ferrite (CoFe<sub>2</sub>O<sub>4</sub>): A Material with High Magnetostriction Produced by Sol-Gel Method; Keywords Index; Authors Index

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#### Sommario/riassunto

These 19 peer-reviewed papers cover emerging topics in Advanced Materials (e.g.: polymer composites, nanocomposites, ceramics, thin-film coatings and shape-memory alloys) and thus offer an unique insight into current progress. Review from Book News Inc.: Selected papers from a January 2011 conference held in Pakistan highlight the latest work in advanced materials areas such as polymer composites, thin film coatings, and shape memory alloys. Papers are grouped in sections on composites, nanocomposites, ceramics and oxides, and thin films and surface engineering. Some specific topics addressed

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