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Titolo	Nano-scale materials, materials processing and genomic engineering : selected, peer reviewed papers from the 12th IUMRS International Conference on Advanced Materials (IUMRS-ICAM 2013), September 22-28, 2013, Qingdao, China // edited by Yafang Han, Xuefeng Liu and Meifang Zhu ; organized by Chinese Materials Research Society(C-MRS), International Union of Materials Research Societies (IUMRS) ; supported by Ministry of Science and Technology of China [and six others]
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Collana	Materials Science Forum, , 1662-9752 ; ; Volume 789
Disciplina	620
Soggetti	Engineering Genomes 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 at the end of each chapters and indexes.
Nota di contenuto	Nano-Scale Materials, Materials Processing and Genomic Engineering; Preface, Organizers and Supporters; Table of Contents; Nano-Scale Materials; Fabrication and Characterization of Integrated Ultrahigh-Density Pt Nanowire Arrays within the AAO Template; Stability of Nanofluids for Heat Pipe; Polyaniline Grafted Amino-Functionalized Graphene Nanocomposite with Excellent Electrochemical Performance for Supercapacitor Electrode Materials; Solid-State Synthesis and Thiophanate Methyl Visible Light Degradation of Magnesium Doped TiO <sub>2</sub> Mesoporous Nanomaterial Effect of Dysprosium Content on the Magnetic Properties of Nanocrystalline (Pr <sub>0.25</sub> Nd <sub>0.75</sub> ) <sub>10-x</sub> DyxFe <sub>82</sub> Co <sub>2</sub> B <sub>6</sub> Alloys Fabrication of Microfibrous Patterns via Electrospinning; Preparation of 1D or 3D Nano ZnO Crystals in High-Viscosity Solvent; Effect of the Ce-TiO <sub>2</sub> /Diatomite on the Photo-Catalysis Degradation of MB; Amorphous Materials; Effect of Aging Temperature on Microstructure and Hardness of CoCrFeNiTiO.

5 High Entropy Alloy; Microstructure and Properties of Ni<sub>70.2</sub>Si<sub>29.8</sub> Eutectic Alloy Produced by Directional Solidification; Fe-Based Bulk Metallic Glass with Good Soft Magnetic Properties  
Hardness Regulation of Fe-Based Amorphous Composite Coatings by Laser Remelting Influence of Laser Remelting on the Corrosion Resistance of Fe-Based Amorphous Composite Coatings;  
Microstructural Evolution and Hardness of CoxCrCuFeNi High-Entropy Alloys; Research of Crystallization Kinetics and Thermal Stability of W<sub>48.5</sub>Ni<sub>34</sub>Fe<sub>14.6</sub>B<sub>2.9</sub> Amorphous Ribbons; Advanced Fibers and Nano-Composites; TEMPO-Mediated Oxidation of Bacterial Cellulose in Buffer Solution; Facile Preparation of Gradient Structure Bacterial Cellulose Using Potato Starch  
Preparation and Properties of Cotton Fiber/Poly(lactic acid) Composites Effect of Two-Step Treatments on Interfacial and Mechanical Properties of Sugarcane Rind Fiber/Natural Latex Biodegradable Composites; Anti-Corrosive Epoxy Primer Modified with Nano Particles; Preparation and Characterization of TPU Toughened PLA Elastic Fibers; Preparation and Biological Characterization of Electrospun Aligned Poly(butylene carbonate) Nano-Fibers; Fabrication and Properties of Porous Scaffolds of PLA-PEG Biocomposite for Bone Tissue Engineering  
Preparation and Characterization of Ethylene-Octene Copolymer/Modified Nanosilica Composites by Radiation Processing Morphology Control of Polyimide Fibers by Phase Separation under Different Coagulation Bath Conditions; Improving Preferred Orientation and Mechanical Properties of the PAN-Based Carbon Fiber Precursors by Using Saturated Steam Stretching Process; Facile Fabrication of Super-Hydrophobic Surface on Aluminum and its Effects in Accelerating Underwater Bubble Bursting; Raman Spectroscopy Studies on the Microstructure Evolution from Cellulose to Carbon Fiber  
Design of ACF Microwave Absorbing Composites with Triangle Patches and Circular Aperture Elements

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#### Sommario/riassunto

Collection of selected, peer reviewed papers from the 12th IUMRS International Conference on Advanced Materials (IUMRS-ICAM 2013), September 22 -28, 2013, Qingdao, China. the 110 papers cover the current know how in: Nano-Scale Materials; Amorphous Materials; Advanced Fibers and Nano-Composites; Advanced Materials Processing; Surface Coating and Technology; Materials Modeling and Simulation; Materials Characterization and Evolution. One of three volumes of proceedings, this volume contains 48 papers from the nano-scale and amorphous materials symposium and 62 papers from the materials processing

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