1. Record Nr. UNINA9910810706103321

Titolo	Advances in materials science : selected, peer reviewed papers from the International Conference on Advances in Materials (ICAM 2014), December 13-14, 2014, Shanghai, China / / edited by Zou Jianxin
Pubbl/distr/stampa	Pfaffikon, Zurich, Switzerland : , : Trans Tech Publications, , 2015 ©2015
ISBN	3-03826-788-0
Descrizione fisica	1 online resource (875 p.)
Collana	Advanced Materials Research, , 1662-8985 ; ; Volume 1088
Disciplina	620.1105
Soggetti	Materials science Materials - Deterioration
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	Advances in Materials Science; Preface, Technological Committees and Sponsors; Table of Contents; Chapter 1: Nanomaterials and Nanotechnologies; Application of the Nanostructured Carbon Coatings for Improvement of Functional Properties of Medical Polyurethanes; The Dispersion of MWCNTS in Acetone Solution of SAN; Removal of Paraquat from Aqueous Solutions Using Multi-Walled Carbon Nanotubes: Kinetic, Isotherm and Thermodynamic Studies; Effect of Nanostructured Oxide Coatings on Tensile Properties of Cast Pure Magnesium Multifunctional NaYF4:Yb3+, Er3+@Au Nanocomposites: Upconversion Luminescence, Temperature Sensing and Photothermal TherapyComparative Studies for the PAMAM/RE and HPAE/RE (RE=La, Nd, and Eu) Based on Molecular Dynamics Simulations; Facile Synthesis and Photocatalytic Properities of Mini Nanoparticle CdS Quantum Dots/Boron and Nitrogen Co-Doped TiO2 Transparent Photocatalyst Emulsion; Nanomagnetic Particle Anchored to Monodispers Porous Microspheres for Pectinase Immobilization; Effect of Noble Metal Nanoparticles in SERRS Measurements of Water-Soluble Porphyrins In Situ TEM Manipulation and Property Study of Cd2Ge2O3 NanowiresStructures and Performances of PA6/PVA Nanofibers

Membranes from Electrospinning; A Simple Solvothermal Synthesis of Spherical Y2O3:Eu3+; Antibacterial Potential of Silver Nanoparticles Capped with Poly(4-styrenesulfonic acid-co-maleic acid) Polymer; Chapter 2: Thin Films; Synthesis, Characterization and Thermal Properties of SiO2/Pi Composite Film; Fabrication and Characterization of Al/Ni Multilayer Films; SiO2ZrO2 Thin Films as Low Temperature NO2 and O3 Sensors
Preparation and Characterization of Cd1-xZnxS Thin Films with Chemical Bath DepositionSynthesis and Characterization of Au-CdS Composite Thin Films for Photoelectrochemical Sensing of Hg2+ Ions; Highly Transparent Flexible Clay Film with Organized Polymer; Study on Preparation and Surface Properties of Fluorinated Acrylate Hydrophobic Polymer Film; Effect of Thermal Annealing on La2O3 Films Grown by Plasma Enhanced Atomic Layer Deposition; Chapter 3: Metal-Based Materials, Alloys and Metallurgical Technology
Effect of Oxygen Content in Powders on Microstructure and Mechanical Properties of WC-FeAl Composites Fabricated by Vacuum Sintering TechniqueInfluence of Chlorine Additives on Combustion Rate of Pulverized Coal Injection; Friction Stir Processing of Cast Iron Using Cermet Tool; Welding-Brazing Characteristic in Electron Beam Joining Vanadium Alloy and Stainless Steel; Improvement of Wet Milled TiC-Feal Alloys; Application of Orthogonal Experiments Design to Optimize Process Parameters in the Alloy Heat Treatment; Study on Clinching for Similar and Dissimilar Titanium Alloy
The Effect of Enhanced Solution Treatment on Microstructures and Properties of 6013 Type Aluminum Alloy

Sommario/riassunto

Collection of selected, peer reviewed papers from the International Conference on Advances in Materials (ICAM 2014), December 13-14, 2014, Shanghai, China. The 167 papers are grouped as follows: Chapter 1: Nanomaterials and Nanotechnologies; Chapter 2: Thin Films; Chapter 3: Metal-Based Materials, Alloys and Metallurgical Technology; Chapter 4: Crystallography, Chemical and Cathode Materials; Chapter 5: Polymers and Composite Materials; Chapter 6: Biomaterials and Biotechnologies; Chapter 7: Materials and Technologies in Environmental Engineering; Chapter 8: Building Materials and Technologies