1. Record Nr. UNINA9910822380003321

Titolo	Advanced computational engineering and experimenting : selected, peer reviewed papers from the Fourth International Conference on Advanced Computational Engineering and Experimenting (ACE-X 2010), July 8th-9th, 2010, held at Hotel Concorde La Fayette Paris, France / / edited by Andreas Ochsner, Lucas F.M. da Silva and Holm Altenbach
Pubbl/distr/stampa	Stafa-Zurich, Switzerland, : Trans Tech Publications, 2011
ISBN	3-03813-501-1
Edizione	[1st ed.]
Descrizione fisica	1 online resource (122 pages)
Collana	Key engineering materials, , 1013-9826 ; ; v. 478
Altri autori (Persone)	OchsnerAndreas SilvaLucas Filipe Martins da <1973-> AltenbachHolm <1956->
Disciplina	620.11
Soggetti	Engineering mathematics Engineering mathematics - Experiments Engineering mathematics - Experiments - Computer simulation
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 Computational Engineering and Experimenting; Preface; Table of Contents; Production of Magnesium Titanate-Based Nanocomposites via Mechanochemical Method; Simultaneously Synthesis and Encapsulation of Metallic Nanoparticles Using Linear-Dendritic Block Copolymers of Poly(ethylene glycol)-Poly(citric acid); Study of the Properties of Al2O3-Ag Nanopowders Produced by an Innovative Thermal Decomposition-Reduction and Silver Nitrate Reduction Methods; Mechanical and Microstructural Properties of Cement Paste Incorporating Nano Silica Particles with Various Specific Surface Areas Improvement of the Corrosion Resistance for the Galvanic Coupling of Steel with Polypyrrole Coated Galvanized Steel Experimental Characterization of Hydrogen Embrittlement in API 5L X60 and API 5L X80 Steels; Corrosion Monitoring in Marine Environment Using Wavelet Description; Experimental and FEM Analysis of the AA 6082 Processed by Equal Channel Angular Extrusion; A Probabilistic Approach to the

Simulation of Non-Linear Stress-Strain Relationships for Oriented Strandboard Subject to In-Plane Tension; Generalized Maxwell Model as Viscoelastic Lubricant in Journal Bearing
Comparative Analysis of Vaporization Rates of 5456 Aluminum Alloying Elements during CO2 Laser Welding Analysis of Chip Damage Risk in Thermosonic Wire Bonding; Free Vibration Characteristics of Thermally Loaded Rectangular Plates; Structure-Property Relationship of Burn Collagen Reinforcing Musculo-Skeletal Tissues; Femur Design Parameters and Contact Stresses at UHMWPE Hip Joint Cup; Biomechanical Characterization of a Cervical Corporectomy Using Porcine Specimens, Following an Experimental Approach; Keywords Index; Authors Index

Sommario/riassunto

The goal of this special collection was to provide an unique opportunity to exchange information, to present the latest results as well as to review relevant issues concerning contemporary research in mechanical engineering. Young scientists in particular were encouraged to submit their latest research results, and this is reflected in the final result. Review from Book News Inc.: The 16 selected and refereed papers discuss recent developments in mechanical engineering such as mechanical and microstructural properties of cement paste incorporating nanometer silica particles with various specific