1. Record Nr. UNINA9910465148003321

Titolo	Advances in materials engineering : selected, peer reviewed papers from the 2013 International Conference on Materials Engineering (ICMEN 2013), May 17-19, 2013, Nanjing, China / / edited by Yingtao Jiang and Fang He
Pubbl/distr/stampa	Durnten-Zurich ; ; Enfield, NH : , : Trans Tech Publications, , [2013] ©2013
ISBN	3-03826-182-3
Descrizione fisica	1 online resource (268 p.)
Collana	Applied mechanics and materials ; ; v. 377
Altri autori (Persone)	JiangYingtao HeFang
Disciplina	620.1
Soggetti	Materials - Research Materials science Electronic books.
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	Advances on Materials Engineering; Preface and Committees; Table of Contents; Chapter 1: Reinforced Materials, Structural Materials and Engineering; Finite Element Analysis of Stiffness of Steel Plate with a Rectangular Cutout Bonded by Composite Patches; Stiffness Analysis of Steel Plate with a Rectangular Cut out Bonded by Composite Patch; Sound Insulation Performance of Finite Orthotropic Sandwich Panels; Wave Propagation in Plate Covered by Periodic Damping Structures; Numerical Modeling of Steel Fiber-Reinforced Beam Continuous SiC Fibre-Reinforced SiC Matrix Composites: An Analysis Based on PatentsDynamic Damage Assessment of Inter-Layer Seismic Isolation Buildings under Spectral Indicators; Static Analysis of Viscoelastic Reinforced Thick-Walled Cylinder; Chapter 2: Concrete and Cement, Mortars; Thermal Properties of PVA-Fiber Reinforced Cement Composites at High Temperatures; Effects of Fly Ash/Slag Ratio and Liquid/Binder Ratio on Strength of Alkali-Activated Fly Ash/Slag Mortars; High Temperature Testing of Cement Mortar Containing MSWI Bottom Ash

Compressive Strength of Cement Mortar Using Sebha Clay, Treated by Sonication MethodPerformance of High-Efficiency Liquid Cement Setting Accelerator with Alkali-Free and its Acceleration Mechanism; Influence of Fly Ash on Thaumasite Form of Sulfate Attack in Cement-Based Materials; Application of Ultrafine Fly Ash in Commercial Concrete; Ring Test for the Measurement of Restrained Shrinkage of Concrete; Prediction Model and Relationship of Compressive and Tensile Strengths for High Performance Concrete; Experiment on Properties of Recycled Aggregate Concrete
Chapter 3: Materials Processing TechnologyControlled Rolling and Controlled Cooling Technology of Fe-C-Mn-Si Multiphase Steel; Investigations on Low Environmental Impact Machining Processes of Free Cutting Austenitic Stainless Steels; Adjustment of Mill CNC Parameters to Optimize Cutting Operation and Surface Quality on Acrylic Sheet Machining; Phase Transformation Behavior during Continuous Cooling of Fe-C-Mn-Si Multiphase Steels; Effect of Rare Earth Elements on Machining Characteristics of Austenitic Stainless Steels without Lead Addition
Analysis of Warpage and Optimization of Parameter for Thin-Wall Plastic Part Moldflow-Based SoftwareChapter 4: Energy, Electric and Optics Materials; Optimal Charge and Discharge Capacity Effects of the Sintering Process on LiMn2O4 by the Solid-State Reaction Method; Comparative Study on Luminescent Properties of LiLa2BO5:Tb3+ Phosphors Synthesized with Different Methods; Synthesis of Ultrafine Spherical Yttrium Aluminum Garnet Powders from Yttrium Nitrate and Aluminum Nitrate System
Barrier Properties of Printed Composite Zinc Phthalocyanine/Fullerene Sandwiched between Indium Tin Oxide and Alluminium Electrodes

Sommario/riassunto

Collection of selected, peer reviewed papers from the 2013 International Conference on Materials Engineering (ICMEN2013), May 17-19, 2013, Nanjing, China. The 46 papers are grouped as follows: Chapter 1: Reinforced Materials, Structural Materials and Engineering; Chapter 2: Concrete and Cement, Mortars; Chapter 3: Materials Processing Technology; Chapter 4: Energy, Electric and Optics Materials; Chapter 5: Nanomaterials and Nanotechnologies; Chapter 6: Bio- and Environment Materials; Chapter 7: Thin Films; Chapter 8: Polymers, Alloys and Other Materials Technologies. Drawn from the papers pres