Record Nr. UNINA9910465145803321 **Titolo** Materials and Diverse Technologies in Industry and Manufacture: selected, peer reviewed papers from the 2013 International Conference on Mechanical, Automative and Materials Engineering (CMAME 2013), July 26-27, 2013, Hong Kong / / edited by Muhammad Yahaya Pubbl/distr/stampa Durnten-Zurich, Switzerland: ,: Trans Tech Publications, , [2013] ©2013 **ISBN** 3-03826-188-2 Descrizione fisica 1 online resource (503 p.) Collana Applied mechanics and materials; ; v. 376 Altri autori (Persone) YahayaMuhammad Disciplina 620.11 Soggetti Production engineering Information technology - Management Manufacturing industries 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. Materials and Diverse Technologies in Industry and Manufacture: Nota di contenuto Preface, Committees and Sponsors; Table of Contents; Chapter 1: Materials Science, Structural Composites, Material Processing; Analysis and Modeling of Wafer Thermal Transfer in a PECVD Reactor; Effect of Physical Parameters on DeNOx Conversion in Selective Catalytic Converter Used in Diesel Vehicles; Powder Injection Molding of 20-40 Vol.% Silicon Carbide Particulate-Reinforced Aluminum Composites: The Study of Manufacturing and Ingot Characterization of U-Zr Alloys; Dyeing of Blended Fabric with Pigment Table Type Sun Drying for Seaweed Preservation SPS Method for Manufacturing Carbide Materials; Friction Stir Welding of Dissimilar 5xxx to 6xxx Al Alloys: A Review; Oxidation of Nb/Nb5Si3 In Situ Composites Fabricated via Spark Plasma Sintering with Al Addition: Effect of Co Addition on the Microstructure of Matrix in Tungsten Carbide Reinforced Surface Composite; Lifetime Prediction of Fire Extinguishing Pipeline by Means of Extreme Value Statistics; Acetylene

Ignition Process in Combustion Thermal Spray; In-Plane Shear Damage

Prediction of Composite Sandwich Panel with Foam Core

The Influences of Reheating Process to the Semi-Solid Microstructure of Hypereutectic Al-22Si-1.93Fe-1.36Mn Alloy by Cooling Slope Laminar Burning Velocity and Flammability Characteristics of Biogas in Spark Ignited Premix Combustion at Reduced Pressure; Chapter 2: Nanomaterials Science; Effect of TiO2 Nanoparticles on Tensile and Photodegradation Behavior of Biopolymer Films Based on Poly(Butylene Succinate); Effects of pH on Tin Nanoparticles Prepared Using a Modified Polyol Synthesis; Nanofiber: Applications and Implementation in Advance Water Treatment Techniques

Chapter 3: Mechanical Properties of Materials, Deformation, Coating Engineering Finite Element Study on the Influence of Shear Key Diameter on the Shear Performance of Composite Sandwich Panel with PU Foam Core; Study on the Rock Slope Landslide Caused by Earth Penetrating Weapon Explosion; Stress Analysis of the Suspended Centrifuge Drum for Sugar; 1000mm2 Conductor Creep Characteristics and Temperature Reduction Value; Effects of Hard Segment Contents on Dynamic Mechanical Properties of Gap-Based Polyurethane Elastomers; Strength of Extreme Soils Blended with Fly Ashes for Pavement

Effect of Internal Pressure and Dent Depth on Strain Distribution of Pressurized Pipe Subjected to Indentation Research on In-Planestatic Mechanical Performance of Honeycomb Paperboard Based on Virtual Simulation; Microstructure and Hardness of Fe-Based Coating by Plasma Cladding; Fabrication and Mechanical Properties Study of the Magnetorheological Elastomer; Microstructure and Mechanical Properties of Ti/Cu-Cr/S20C and Ti/Cu-Ag/S20C Clad Composites; Investigation on Effect of the Pitch of Shear Keys on the In-Plane Shear Performance of Sandwich Panels with PU Foam Core: FE Study Effect of Thermo-Mechanical Treatment (TMT) on Hardness of Heat-Treated Al-Mg-Si (6082) Alloys: Experimental Correlation Using (DOE) Method

Sommario/riassunto

Collection of selected, peer reviewed papers from the 2013 International Conference on Mechanical, Automotive and Materials Engineering (CMAME 2013), July 26-27, 2013, Hong Kong. The 89 papers are grouped as follows: Chapter 1: Materials Science, Structural Composites, Materials Processing; Chapter 2: Nanomaterials Science; Chapter 3: Mechanical Properties of Materials, Deformation, Coating Engineering; Chapter 4: Computing Methods and Algorithms; Chapter 5: Experimental Methods and Studies; Chapter 6: Design, Modelling, Simulation and Optimization Technologies, CAD Applications; Chapter 7: Au