

1. Record Nr.	UNINA9910815044003321
Titolo	Mechanical structures and smart materials : selected, peer reviewed papers from the 2013 International Conference on Mechanical Structures and Smart Materials (ICMSSM 2013), November 16-17, 2013, Xiamen, China / / edited by Christopher Rhys Bowen
Pubbl/distr/stampa	Durnten-Zurich : , : Trans Tech Publications Ltd, , [2014] ©2014
ISBN	3-03826-370-2
Descrizione fisica	1 online resource (737 p.)
Collana	Applied mechanics and materials, , 1660-9336 ; ; volume 487
Altri autori (Persone)	BowenChristopher Rhys
Soggetti	Smart structures Smart 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 and indexes.
Nota di contenuto	Mechanical Structures and Smart Materials; Preface, Committees and Sponsors; Table of Contents; Chapter 1: Materials Science and Technology; Snoek-Type An elastic Relaxation in a Water-Quenched Ti-Nb Alloy; Construction of Johnson-Cook Model for Gr2 Titanium through Adiabatic Heating Calculation; High Temperature Oxidation Behaviors of CNTs/MoSi <sub>2</sub> Composites; Study on Effects of the Nano Reinforcing Material on the Mechanical Properties of Self-Healing Composites; Synthesis and Electrical Applications of ZnS <sub>0.59</sub> Se <sub>0.41</sub> Nanowires; BaxSr <sub>1-x</sub> TiO <sub>3</sub> Different Thickness Analysis Using Sol Gel Approach CuDia Slug Size Variation Analysis on Heat Dissipation of High Power LED Analysis on Surface Roughness and Surface Reflectance through DOE; Study on Pitting Corrosion Resistance of Nanocrystallized Bulk 304 Stainless Steel in 0.5mol/L Hydrochloric Acid Solution; The Study of Ti-Al Layered Composite Electrode in the Anti-Gravity Casting Method; Heat Transfer Characteristics of Fe <sub>3</sub> O <sub>4</sub> -H <sub>2</sub> O Nanofluids by External Magnetic Field; Investigation on Acoustic Emission Characteristics from Corrosion of Conventional Materials of Primary Pipe in Nuclear Power Plants Development of Acoustic Emission Sensor Based on the 0-3 PZT/P

(VDF-TFE) Piezoelectric Composite Investigation on the Heat Conduction in Si/3C-SiC/Graphene Film; Tribological Properties of the ZrN Coatings by DC Magnetron Sputtering; Surface Roughness Scrutinization with RIE CF<sub>4</sub>+Argon Gaseous on Platinum Deposited Wafer; Adhesion of Streptococcus mutans on Different Types of Orthodontic Elastic O-Rings; Phase Transformations and Magnetic Properties of Electroplating Ni-Co on Aluminium; Effect of Recycled Coarse Aggregate on Recycled Concrete Properties and Study of Optimum Mixture Ratio

Fibrous Material Surface Reflectance Analysis Research of Calibration Curves NMR Relaxation Times of Nanoparticles Gadolinium Oxide; A Preliminary Study on the Anti-Mosquito Nanocapsule; Thermal Conductivity of Hexagonal SiC Nanowire by Nonequilibrium Molecular Dynamics Simulations; Physical Characterization of BST with Different (x') Ratios; Effect of Normalizing on Microstructure and Mechanical Properties of EH36 Alloy; Fibrous Material Density Difference Analysis Using Light Reflectance; Chapter 2: Materials Manufacturing and Processing

Melt-Processable Acrylonitrile-Methacrylate-Dimethyl Maleate Terpolymers and Fibers The Forming Process of the Stainless Steel Joint Part Numerical Simulation Analysis; Preparation and Properties of Zinc-Doped Hydroxyapatite Whisker; Effect of Direct Electric Resistance Heat Treatment on Loading/Unloading Behavior of Nickel Titanium Orthodontic Wire; Surface Roughness Analysis on Reactive Ion Etched Aluminium Deposited Wafer; Operating Temperature Analysis of LED with Cylindrical Cu Slug; Heat Sink Fin Number Variation Analysis on Single Chip High Power LED

Effects of Specific Pressure and the Dual Refiner on Microstructure of the Squeeze-Cast 2024 Aluminum Alloy Drive Hollow Shaft

---

## Sommario/riassunto

Collection of selected, peer reviewed papers from the 2013 International Conference on Mechanical Structures and Smart Materials (ICMSSM 2013), November 16-17, 2013, Xiamen, China. The 150 papers are grouped as follows: Chapter 1: Materials Science and Technology; Chapter 2: Materials Manufacturing and Processing; Chapter 3: Applied Mechanics, Manufacturing System and Engineering Design; Chapter 4: Modeling and Simulation; Chapter 5: Mechatronics, Monitoring and Control Systems; Chapter 6: Information Technology and Automation About 150 selected and peer-reviewed papers discuss materials science

---