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Collana	Applied Mechanics and Materials, , 1662-7482 ; ; Volume 526
Disciplina	681.2
Soggetti	Engineering instruments Physical measurements Mechanical engineering laboratories 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 at the end of each chapters and indexes.
Nota di contenuto	Mechanical Engineering and Instrumentation; Preface and Organizing Committee; Table of Contents; Chapter 1: Materials Science and Materials Processing Technology; Research on Milling Parameters Optimization Based on Surface Residual Stress for Aviation Stainless Steel; An Analysis of Electromagnetic Sheet Metal Forming Process; Cracked ITO on Polyester Film Substrates for Electro-Optic Applications; Containerless Processing in the Study of Metastable Solids from Undercooled Melts Experimental Research on Surface Roughness and Topography of Grinding Ultra-High Strength Steel Aermet100 with CBN Wheel Study on Preparation and Photocatalytic Activity of Photocatalyst Made from Ti-Bearing Blast Furnace Slag; Research of the Surface Changes in the Modification Process of Activated Carbon; Study of Method for Determination of Thermal Conductivity of Automotive Interior Materials; Study on Contrastive Experiment of Full-Scale Concrete Beam Strengthened with Near-Surface-Mounted and Externally-Bonded Carbon Fiber Plate

Decay Characteristic of Gallium Nitride Photocathode in a High Vacuum System  
Linear Polarization Method Research of Quantitative Detection Based on Concrete Reinforcement Corrosion; Nondestructive Testing of Composite Bonding Structure Using Guided Wave; The Application and Development of Composite Material Detection Using Dry Coupled Acoustic Technology; A Novel Method to Fabricate Silicon-Beam with Polygon Section Based on Thermal Oxidation Layer Protection Technique; Study on the Effects of the Preparation Conditions on the Combination of Eosin Dye and TiO<sub>2</sub>

Chapter 2: Computational and Applied Mechanics  
Mechanic Models for Structure Health Monitoring Based on Wireless Sensors Networks Positioning; Measuring Natural Frequency of Large Control Moment Gyroscope; Analysis and Simulation of Stepper Motor Disturbance Considering Structural Coupling; Application of a Method on Optimization of Thin-Walled Column's Crashworthiness Based on Metamodel; The Research on Grounding Pressure Distribution of Tracked Travelling Mechanism; Research on the Method of Numerical Calculation for Hydrodynamic Parameters of Underwater Vehicle Modal Analysis of Transient Liquid Sloshing in Partially-Filled Tanks  
Transient Liquid Sloshing in Partially-Filled Tank Vehicles; A Improved Particle Swarm Optimization Algorithm for the Application with Boundary-Layer Problems of Power-Law Fluids; Diffraction of Elastic Waves by a Cylindrical Nanohole; Center Track Analysis and Simulation Considering Effect of Vortex and Perturbation of Cutting Fluid on BTA Boring Bar; Fault Mechanism Analysis and Characteristic Extraction for Multi-Disc Clutch; Redundant Actuation Investigation of a 5-DOF Parallel Robot  
Research on the Improvement of Technology of Low Pressure Loss and Wide Range Swirlmeter

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Sommario/riassunto

Collection of selected, peer reviewed papers from the 2013 International Conference on Mechanical Engineering and Instrumentation (ICMEI 2013), December 31, 2013-January 2, 2014, Brisbane Australia. The 64 papers are grouped as follows: Chapter 1: Materials Science and Materials Processing Technology; Chapter 2: Computational and Applied Mechanics; Chapter 3: Design and Manufacturing; Chapter 4: Automation, Control, Information Technology and MEMS

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