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Collana	Advanced materials research, , 1022-6680 ; ; volume 321
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Nota di contenuto	Advanced Research on Intelligent Materials and Mechanical Engineering; Preface and Committees; Table of Contents; Chapter 1: Material Engineering and its Application; A New Method for Mechanics Analysis of Bar Structure Materials; Effect of Glass Microballoons Size on Compressive Strength of Syntactic Foams; Design and Implementation of Metal Detection Based on Eddy Current Sensor; Natural Convection in a Cavity Partially Filled with a Vertical Porous Medium; Anti-Noise Capability Analysis for the XRD of YBaCuO Nano Powder Based on WVD The Noise Analysis for the XRD of YBaCuO Nano Powder with STPSGrey Unbiased GRM(1,1) Model Based on Accumulated Generating Operation in Reciprocal Number and its Application; Grey New Information GOM (1,1) Model and its Application Based on Opposite-Direction Accumulated Generating and Background Value Optimization; Design of Sine-Wave Control System of BLDCM Regarding a New Permanent-Magnet Material; Research on Dynamic Analysis Ability of STPS for Non-Stationary Noise of Ceramic Paste Inner Stress; Study on Dynamic Analysis of WT for Ceramic Paste Inner Stress Research on Guiding Strategies of VMS and their Effects Based on

Intelligent Materials Structural Optimization of Building Materials Using Optimality Criteria Approach and its Realization in ANSYS; A COM Approach for Designing and Implementing a Material and Energy Statistical Analysis System; Synthesis, Structural Characterization and Photoluminescence of Six-Coordinated Zn(II) Complex Material; Preparation, Spectral Characterization and Fluorescence Property of Schiffbase Mg(II) Complex Material; Particle Swarm Optimization MPPT Method for PV Materials in Partial Shading
Improved Output Characteristic of Distributed Hybrid Solar-Wind Generating Materials by Using Fuzzy and Immune MPPT Control Method
The Combined Fuzzy and PO MPPT Method for PV Materials under Partially Shaded Conditions; Finite Element Stress Analysis on Structure of Hydraulic Support; Numerical Approximation of Stochastic Systems for Composite Materials Based on Markov Chains; Portage Robot for Crystal Silicon Solar Cell with Photovoltaic Material; Research on the Effect of Doping Ca Ion and Organic Solvent on the Luminescent Intensity of Tb Complex Material
Research on the Effect of Mg (II) Ion Concentration on the Luminescent Intensity of Tb Complex
Force Analysis and Studies on Track Frame of Hydraulic Drill; Analysis of Piezoelectric Acoustic Sensor Based on Negative Impedance with FEM in Composite Materials; Stochastic Material Model and Application System Analysis; In Situ Synthesis and Luminescence Characteristics of Complexes Europium with Schiff Base Ligands; Preparation and Luminescence Properties of Two Novel Magnesium Complex Materials; Chapter 2: Material Science and Engineering
Synthesis, Structural Characterization and Luminescence Property of Ring-Like Zinc(II) Complex of N-Paratoluensulfonyl-Glycine Acid and 1,10-Phenanthroline

Sommario/riassunto

These proceedings offer original ideas and new perspectives on the topics of Intelligent Materials and Mechanical Engineering. They arose from an excellent forum within which researchers could exchange innovative ideas and new points of view. They will also provide guidance for scientists, physicists, chemists, teachers, engineers, etc., all over the world. Review from Book News Inc.: Four of the 58 papers presented during the September 2011 conference discuss experiments on the mechanical properties of soybean protein fiber yarn conducted at Qingdao University. Another four papers from the Sh
