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Collana	Solid state phenomena, , 1012-0394 ; ; v. 208
Altri autori (Persone)	KotAndrzej
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Control Engineering in Materials Processing II; Introduction; Table of Contents; Determination of Emissivity Characteristics for Controlled Cooling of Nickel-Alloy Forgings; Application of CFD in Hydraulic Directional Valve Modeling; Wave Packet as a Model of Localised Disturbances Propagating along the Cables; Dynamic Similarity of Wind Turbine's Tower-Nacelle System and its Scaled Model; Development of Laboratory Model of Wind Turbine's Tower-Nacelle System with Magnetorheological Tuned Vibration Absorber; Model Testing of the 2nd Phase of Die Casting Process FEM Analysis of a Cantilever Sandwich Beam with MR Fluid Based on ANSYS Diagnosis of Supporting Structures of HV Lines Using Magneto-Mechanical Effects; Experimental Tests of an Electromechanical Transducer of Reverse Linear Motion into Electrical Energy; A Project of a System for Measuring Child's Foot Pressure on a Shoe Sole; The Application of Visual Evoked Potentials in Brain-Computer Interface; Design and Modeling of FEM Seals with Controlled Clamp Spring Elements; Interval Type-2 Fuzzy Logic Control of DM Series Shape Memory Actuator LQG Control of the Smart Truss with the Piezoelectric Active Members Laboratory Research on Energy Harvesting of Ionic Polymer Metal Composite; Simulation of 2S1 Tracked Vehicle Model with

Modernized Suspension System during Crossing a Single Obstacle; Shape Prediction of Non-Ferrous Pipe Elements Processed by Electro-Dynamic Forming; Effect of Interfaces on Mechanical Properties of Ceramic/Metal Multilayers; The Fractional Brownian Motion Approach to Analysis of Fractional Control System with Non-Stationary Plant; The Analysis of the Different Frequencies Sound Waves Effect on the EEG Signal
Development of Research Methods for the Assessment of the Technical Condition of Ropes Analysis of Dependence between Stress Change and Resonance Frequency for Self-Excited Acoustical System; Keywords Index; Authors Index

Sommario/riassunto

The special topic volume with invited papers covers works implementing the Control Theory to materials processing, especially the field of putting materials properties to its better use in manufacturing processes. Instead of only using principles of control theory for materials, researchers use phenomena arising in materials for control purposes. In this topic book most considerations are focused on the group of "Smart Materials" ie. Shape Memory Alloys (SMA) or Piezoelectrics. Mechanical engineers discuss the role of control engineering in processing materials, especially in manufacturing c
