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Applications; Finite Element Analysis of Precipitation Effects on Ni-Rich NiTi Shape Memory Alloy Response
Enhance the Sensibility of the Resonance Type Eddy Current TestingII. Advanced Applications; Magneto-Optical Study on Transparent Lanthanide Glasses in Pulsed High Fields up to 30T; Three-Dimensional Magnetic Field Analysis for Local Induction Heating of Steel Sheet by Using Magnetic Flux Concentration Plate; Hadfield Steel Hardening by Explosion; Development of a New High Sensitive Eddy Current Sensor; Quantitative Defect Detection inside Metal Casting Specimens by Means of MFES; Spectral Green's Function for SPR Meta-Structures; Joining of Tubular Parts by Electromagnetic Forming
Experimental InvestigationsLocal Vector Magnetic Characteristic Analysis of a Three-Phase Three-Leg Transformer Model Core; A Combined Model for the Stress State Evaluation in Single Overlap Joints Using Piezo-Ceramic Actuators; Design and Test Procedures for EMI Filters Used for Nonlinear Loads; Steel Health Monitoring Using Magnetic Techniques; III. Magnetic Material Manufacturing and Characterization; Investigation of Cluster Formation in MR Fluid under Compression Using Ultrasonic Measurement; Reduction of the Contact Corrosion on the Electrical Networks by Applying Bimetallics
Development of Magnetic Coupling Utilizing Magnetic Material Attached Magnetic-Flux Concentrated Surface Permanent Magnet ArrangementA Family of Ultra-Thin, Octagonal Shaped Microwave Absorbers for EMC Applications; Dynamic Magnetic Field and Oscillating Simulations of a Hybrid Magnetic Suspension System Utilizing Permanent Magnets; ""In Situ"" Evaluation of Ferromagnetic Bodies Magnetic Characteristics; Magnetic Testing of Power Plant Steel Deterioration; An Open Sample Measurement System for Soft Magnetic Material AC Characterization
Joining of Tubular Parts by Electromagnetic Forming: Computational Investigations of Strength

Sommario/riassunto

Collection of selected, peer reviewed papers from the 8th Japanese-Mediterranean Workshop on Applied Electromagnetic Engineering for Magnetic, Superconducting, Multifunctional and Nano Materials, June 23-26, 2013, Athen, Greece. The 59 papers are grouped as follows: I. Advanced Materials and Magnetohydrodynamics, II. Advanced Applications, III. Magnetic Material Manufacturing and Characterization, IV. Computational Electromagnetics, V. Applications in Traction and Energy, VI. Electrical Machine Technology Sixty papers from the June 2013 workshop present recent research on magnetohydrodynamics,