

1. Record Nr.	UNINA9910461145503321
Titolo	Electromagnetic nondestructive evaluation (XVIII) // edited by Zhenmao Chen, Shejuan Xie and Yong Li
Pubbl/distr/stampa	Amsterdam, Netherlands : , : IOS Press, , 2015 ©2015
ISBN	1-61499-509-5
Descrizione fisica	1 online resource (372 pages)
Collana	Studies in Applied Electromagnetics and Mechanics, , 1879-8322 ; ; Volume 40
Disciplina	620.11278
Soggetti	Magnetic testing Electromagnetic measurements Nondestructive testing 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 index.
Nota di contenuto	Title Page; Preface; ENDE 2014 -- Xi'an, China. Conference Organization; ENDE 2014 -- Xi'an, China. List of Participants; Contents; Plenary Lecture; Evaluation of Residual Strain in the Structural Materials of Nuclear Power Plants; Material Characterization; 3D Efficient Simulation of a Magnetic Probe for Characterization of Ferromagnetic Specimens; Effects of Magnetic Yoke Material on Magnetic NDE Using Impedance Measurement; "Search" the Stress Distribution for the Test Magnetic Field; Austenitic Steel Magnetic Properties Evaluation After Mechanical Deformation. Feasibility Investigation of NDE for Plastic Deformation in Biaxial Specimen Using PECT MethodOptimized Eddy Current Testing Frequency for Deformed 304 Austenitic Stainless Steel; Characterization of the Damage-Induced Magnetization for X80 Steel Under Large Deformation; Plastic Stress Influences on the Magnetization of Ferromagnetic Steel in Geomagnetic field; Fatigue State Evaluation of Ferromagnetic Material Using Magnetic Barkhausen Noise; Analytical and Numerical Modeling of ENDE; Analytical Model for Support Plate Interference in Eddy Current Tube Testing.

Analysis of Pulsed Eddy Current Testing for Ferromagnetic Metallic Materials with Flat-Bottom Hole Defect Theoretical Model and Application for Leakage Field of Ferromagnetic Components with Defects; Numerical Simulation of EMAT for Structures of Ferromagnetic Material with Consideration of Electromagneto-Mechanical Coupling Effect; Analysis of a Pulsed Eddy Current Testing Method for Ferromagnetic Pipeline Wall Thickness Determination Considering Minor Hysteresis; Numerical Simulation of Magnetic Flux Leakage for Crack Geometrical Characterization Based on Spatial Magnetic Field Vectors.

A Finite Element Study of the Differential Pick-Up Coil and the Differential Excitation Coil for Eddy Current NDT Simulation and Analysis of a Piezoelectric Balance; Inverse Problems and Signal Processing; Fast Calculation of Electromagnetic Scattering in Anisotropic Multilayers and Its Inverse Problem; The Monotonicity Imaging Method for PECT; Enhancement of Quantitative Evaluation of Wire Breakage from Measured Magnetic Field with Denoising Algorithm; Monitoring of Flood Embankment System by Nondestructive Method with Infinite Boundary Elements.

Terahertz Inspection of Static Loaded Composite Materials Fusion of Multiple Parameters of Magnetic Testing Results for Damage Assessment of Loaded Steel Structures; New Developments and Innovative Industrial Applications of ENDE; Magnetic Flux Leakage Detection of Corrosion Damage in Prestressed Concrete Poles; Separation of Lift-Off and Defect Depth Features in Magnetic Sensor Based Pulsed Eddy Current Signals; The New Sub-Wavelength Microstructures in Super-Resolution Imaging Based on Stepped Impedance Resonator.
