

1. Record Nr.	UNINA9910811069503321
Titolo	Electromagnetic nondestructive evaluation (XVII) // edited by Klara Capova [and three others]
Pubbl/distr/stampa	Amsterdam, Netherlands : , : IOS Press, , 2014 ©2014
ISBN	1-61499-407-2
Descrizione fisica	1 online resource (380 p.)
Collana	Studies in Applied Electromagnetics and Mechanics, , 1879-8322 ; ; Volume 39
Disciplina	621.374
Soggetti	Electromagnetic measurements Nondestructive testing
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	""Title Page""; ""Preface""; ""Conference Organization""; ""List of Participants""; ""Contents""; ""Advanced Sensors""; ""Electromagnetic Metamaterial Sensors for Structural Health Monitoring""; ""Advances in Magnetic NDE""; ""Biomaterial Real Defects Evaluation Using Advanced Detection Sensors""; ""Low Level Data Fusion of NDT Methods Results for Inspection of Stress Subjected Composite Materials""; ""Pulsed Eddy Current Technique for Testing of Stainless Steel Plates""; ""Ferrite-Composite Sensors for Challenging Environmental Applications"" ""Multi-Method Probe Design for the Electromagnetic Characterization of Advanced High Strength Steel""""Rotating Field Eddy Current Probe for Cylindrical Samples""; ""Analytical and Numerical Modelling and Biomedical Applications""; ""Numerical Behavior of Models of Composite Materials in E'NDT at ``Low' Frequencies""; ""Nondestructive Evaluation of Arterial System Properties Using Electromechanical Analogies and Light Based Diagnostic Methods""; ""The Symposium Project: Numerical Modeling of a Carbon on Steel Manufacturing Benchmark Case"" ""Evaluation of Plastic Deformation in an Austenitic Stainless Steel Based on Nonlinear ECT Method""""Validations of Multifrequency ECT Algorithms for Helical SG Tubes of FBR""; ""Simulation of Pulsed Eddy Current Testing via Surrogate Models""; ""Modelling of Specimen

Interaction with Ferrite Cored Coils by Coupling Semi-Analytical and Numerical Techniques"; "Modeling the X-Probe(R) and the +Point(R) Eddy Current Probes"; "Experimental Measurements and Simulations of ECT Signal for Ferromagnetic SG Tubes Covered by a Sodium Layer"; "Numerical Simulation of EMAT Signals for Detection of Debonding in HIP Welding of Multilayer Tubes"; "Innovative Industrial Applications"; "Applicability of Eddy Current Testing to the Evaluation of Electric Wire"; "Development of Automated Tube Deposit Measurement System for Steam Generator Tubing of Nuclear Power Plant"; "Advances of THz NDE"; "Eddy Current Examination of Steam Generators in Molten Salt Reactor"; "Diagnosis of Supporting Structures of HV Lines with Using of the Passive Magnetic Observer"; "New Developments"; "Detecting and Identifying Deleterious Phases in Lean Duplex Stainless Steel"; "Comparison of Lorentz Force Eddy Current Testing and Common Eddy Current Testing - Measurements and Simulations"; "High Frequency Eddy-Current and Induction Thermography Inspection Techniques for Turbine Components"; "Advances in High Frequency Electromagnetic NDE"; "Nondestructive Evaluation of Eccentricity of ITER In-Vessel Coils Based on Eddy Current Testing"; "Pipe-Wall Thickness Measurement at High Temperature by Electromagnetic Acoustic Transducer"; "Defect Detection with Velocity Induced Eddy Currents Using a Permanent Magnet"

Sommario/riassunto

The demand for new and effective methods for the evaluation, maintenance and live-time testing of objects in fields as diverse as engineering, medicine and art, continues to grow. Electromagnetic non-destructive evaluation is a process by which an object can be assessed without permanent alteration by means of inducing electric currents or magnetic fields within the object and observing the electromagnetic response. This book presents selected papers from the 18th International Workshop on Electromagnetic Non-destructive Evaluation (ENDE), which was held in Bratislava, Slovak Republic, on June
