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Altri autori (Persone)	UhlTadeusz
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Smart Diagnostics V; Preface, ProgramCommittee and Acknowledgment; Table of Contents; Analysis of Possibility of Use Peltier Modules in Task of Energy Scavenging; Application of Artificial Neural Networks for Damage Indices Classification with the Use of Lamb Waves for the Aerospace Structures; Application of Vision Based Damage Detection for Real Civil Engineering Structure; Comparative Study of Instantaneous Frequency Extraction in Nonlinear Acoustics Used for Structural Damage Detection; Damage Detection in RAPTOR Telescope Systems Using Time-Frequency Analysis Methods Damage Detection in Riveted Aircraft Elements Based on the Electromechanical Impedance MeasurementsDetermination of the Penetration Depth of Eddy Currents in Defectoscopic Tests; Development Environment for Diagnostic Multimodal Statement Networks; Development of the Strain Sensors Based on CNT/Epoxy Using Screen Printing; Diagnostics and Transversal Vibrations Control of Rotating Beam by Means of Campbell Diagrams; Diagnostics of the Mechatronic Rotating System Empirical Mode Decomposition of Vibration Signal for Detection of Local Disturbances in Planetary Gearbox Used in Heavy Machinery SystemEnergy Diagnosis of the Structure of the Demolition Hammer

with WoSSo Vibroisolation of a Biomechanical System; Example of Diagnostic Inference Based on Uncertain and Partly Inconsistent Data with Application of the Approximate Statement Network; Identification of the Water-Cooled Fuel Injectors for Engines; Impact of Changing Temperature on Lamb Wave Propagation for Damage Detection
Influence of the Indicator Channel and Indicator Valve on the Heat Release Characteristics of Medium Speed Marine Diesel EnginesLocal Interaction Simulation Approach vs. Finite Element Modelling for Fault Detection in Medical Ultrasonic Transducer; Machine Learning Applications for a Wind Turbine Blade under Continuous Fatigue Loading; Modeling the Effects of Underwater Detonation Wave; New Focus on Gearbox Condition Monitoring for Failure Prevention Technology; Nonlinear Acoustics in Non-Destructive Testing - From Theory to Experimental Application
Object-Relational Model of Experimental Studies of Impact of Climatic Conditions on the Work of a Bi-Fuel EngineOnline Fault Diagnosis of Automotive Powernets by Kalman Filtering; Parametric Time-Frequency Map and its Processing for Local Damage Detection in Rotating Machinery; Possibilities of Using Vibration Signals for the Identification of Pressure Level in Tires with Application of Neural Networks Classification; Power Plant Remaining Life Evaluation; Recent Research on Thermal Fatigue of Composite Elements of Transport Means
Remote Monitoring of Fatigue Cracks Growth in the Aircraft Structure Based on Active Piezosensor Network during the Full Scale Fatigue Test

Sommario/riassunto

The aim of the special collection was to bring together the expertise of scientist and engineers from universities and industry in the field of Structural Health Monitoring, Non-Destructive Evaluation, and Condition Monitoring. The study of damage detection, localization and assessment are important in the rapidly growing field of SHM. Due to interdisciplinary character of SHM systems, the contributions come from experts from area of mechanics, materials engineering, electronics, software engineering, and signal processing as well as system users from civil engineering, aviation, power plants,