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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	1 Damage Assessment of Steel Structures Using Multi-Autoregressive Model -- 2. Damage Detection with Symplectic Geometry Spectrum Analysis in Changing Enviroments -- 3 Compressive Sensing Strategies for Multiple Damage Detection and Localization -- 4 Structural Damage Detection Through Vibrational Feature Analysis with Missing Data -- 5 Damage Detection Optimization Using Wavelet Multiresolution Analysis and Genetic Algorithm -- 6 A Novel Acoustoelastic-based Technique for Stress Measurement in Structural Components -- 7 Non-model-based Damage Identification of Plates Using Curvature Mode Shapes -- 8 A Machine Learning Framework for Automated Functionality

Monitoring of Movable Bridges -- 9 Development of an Acoustic Sensing Based Structural Health Monitoring Technique for Wind Turbine Blades -- 10 Making Structural Condition Diagnostics Robust to Environmental Variability -- 11 Damage Location by Maximum Entropy Method on a Civil Structure -- 12 Exploring Environmental and Operational Variations in SHM Data Using Heteroscedastic Gaussian Processes -- 13 Vibration Testing for Bridge Load Rating -- 14 Finite Element Model Updating of French Creek Bridge -- 15 Damage Detection of a Bridge Model After Simulated Ground Motion -- 16 Bridge Assessment Using Weigh-In-Motion and Acoustic Emission Methods -- 17 Model-based Estimation of Hydrodynamic Forces on the Bergsoysund Bridge -- 18 Operational Modal Analysis and Model Updating of Riveted Steel Bridge -- 19 Finite Element Model Updating of Portage Creek Bridge -- 20 Full-scale Measurements on the Hardanger Bridge During Strong Winds -- 21 Multi-Shaker Modal Testing and Modal Identification of Hollow-Core Floor System -- 22 Hybrid Time/Frequency Domain Identification of Real Base-Isolated Structure -- 23 The use of OMA for the Validation of the Design of the Allianz Tower in Milan -- 24 Vibration Transmission Through Non-Structural Partitions Between Building Floor Levels -- 25 Inelastic Base Shear Reconstruction from Sparse Acceleration Measurements of Buildings -- 26 Genetic Algorithm use for Internally Resonating Lattice Optimization: Case of a Beam-like Metastructure -- 27 Design of Metamaterials for Seismic Isolation -- 28 Transfer Length Probabilistic Model Updating In High Performance Concrete -- 29 Seismic Behavior of Partially Prestressed Concrete Structures -- 30 Ambient Vibration Testing of A Super Tall Building In Shanghai -- 31 Ambient Vibration Testing Of Two Highly Irregular Tall Buildings In Shanghai -- 32 Estimating Effective Viscous Damping and Restoring Force in Reinforced Concrete Buildings -- 33 Structural Assessment of a School Building in Sankhu, Nepal Damaged Due to Torsional Response During the 2015 Gorkha Earthquake.

Sommario/riassunto

Dynamics of Civil Structures, Volume 2. Proceedings of the 34th IMAC, A Conference and Exposition on Dynamics of Multiphysical Systems: From Active Materials to Vibroacoustics, 2016, the second volume of ten from the Conference brings together contributions to this important area of research and engineering. The collection presents early findings and case studies on fundamental and applied aspects of Structural Dynamics, including papers on: • Modal Parameter Identification • Dynamic Testing of Civil Structures • Human Induced Vibrations of Civil Structures • Model Updating • Operational Modal Analysis • Damage Detection • Bridge Dynamics • Experimental Techniques for Civil Structures • Hybrid testing • Vibration Control of Civil Structures.