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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	1 Nonlinear Vibrations of a Beam with a Breathing Edge Crack Using Multiple Trial Functions -- 2 Enforcing Linear Dynamics Through the Addition of Nonlinearity -- 3 Experimental Analysis of a Softening-Hardening Nonlinear Oscillator Using Control-Based Continuation -- 4 Experimental Nonlinear Dynamics of Laminated Quasi-isotropic Thin Composite Plates -- 5 Experimental Identification of a Structure with Internal Resonance -- 6 Shock Response of an Antenna Structure Considering Geometric Nonlinearity -- 7 Investigation on Friction-excited Vibration of Flexibly Supported Shafting System -- 8 Resonant Analysis of Systems Equipped with Nonlinear Displacement-Dependent (NDD) Dampers -- 9 Performance Comparison Between a Nonlinear Energy Sink and a Linear Tuned Vibration Absorber for Broadband Control -- 10 Numerical Assessment of a Tunable Auxiliary Mass

Damper Using a Friction Damper -- 11 Experimental and Numerical Investigation of the Nonlinear Bending-Torsion Coupling of a Clamped-Clamped Beam with Centre Masses -- 12 Tracking of Backbone Curves of Nonlinear Systems Using Phase-Locked-Loops -- 13 The Importance of Phase-Locking in Nonlinear Modal Interactions -- 14 A Study of the Modal Interaction Between Three Nonlinear Normal Modes Using a Backbone Curve Approach -- 15 Investigating Nonlinear Modal Energy Transfer in a Random Load Environment -- 16 Nonlinear Modal Testing Performed by Pulsed-air Jet Excitation System -- 17 EMA-FEA Correlation and Updating for Nonlinear Behaviour of an Automotive Heat-shield -- 18 Tutorial on Nonlinear System Identification -- 19 Higher-Order Frequency Response Functions for Hysteretic Systems -- 20 Model Upgrading To Augment Linear Model Capabilities Into Nonlinear Regions -- 21 Obtaining Nonlinear Frequency Responses from Broadband Testing -- 22 Experimental Study of Isolated Response Curves in a Two-degree-of-freedom Nonlinear System -- 23 Nonlinear Response of a Thin Panel in a Multi-Discipline Environment: Part I - Experimental Results -- 24 Nonlinear Dynamic Response Prediction of a Thin Panel in a Multi-Discipline Environment: Part II - Numerical Predictions -- 25 Stability Analysis of Curved Panels -- 26 Optimal Representation of a Varying Temperature Field for Coupling with a Structural Reduced Order Model -- 27 Basis Identification for Nonlinear Dynamical Systems Using Sparse Coding -- 28 Interaction Between Aerothermally Compliant Structures and Boundary Layer Transition -- 29 Simultaneous Vibration Isolation and Energy Harvesting: Simulation and Experiment -- 30 Nonlinear Dynamic Interaction In A Coupled Electro-Magneto-Mechanical System: Experimental Study -- 31 Hysteresis Identification Using Nonlinear State-Space Models -- 32 Nonholonomically Constrained Dynamics of Rolling Isolation Systems -- 33 Parameter Estimation on Nonlinear Systems Using Orthogonal and Algebraic Techniques -- 34 Online State and Parameter Estimation of a Nonlinear Gear Transmission System -- 35 Model Updating of a Nonlinear System: Gun Barrel of a Battle Tank -- 36 Experimental Passive Flutter Mitigation Using a Linear Tuned Vibration Absorber -- 37 Adaptive Harmonic Balance Analysis of Dry Friction Damped Systems -- 38 Dynamics of an MDOF Rotor Stator Contact System.

Sommario/riassunto

Nonlinear Dynamics, Volume 1. Proceedings of the 34th IMAC, A Conference and Exposition on Dynamics of Multiphysical Systems: From Active Materials to Vibroacoustics, 2016, the first 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: • Nonlinear Oscillations • Nonlinear Modal Analysis • Nonlinear System Identification • Nonlinear Modeling & Simulation • Nonlinearity in Practice • Nonlinearity in Multi-Physics Systems • Nonlinear Modes and Modal Interactions.
