1. Record Nr. UNINA9910254220303321

Titolo	Special Topics in Structural Dynamics, Volume 6 : Proceedings of the 34th IMAC, A Conference and Exposition on Structural Dynamics 2016 / / edited by Dario Di Miao, Pablo Tarazaga, Paolo Castellini
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	87-438-0298-2 87-7004-930-0 3-319-29910-7
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (VIII, 289 p. 229 illus., 183 illus. in color.)
Collana	Conference Proceedings of the Society for Experimental Mechanics Series, , 2191-5652
Disciplina	620
Soggetti	Mechanics, Applied Solids Multibody systems Vibration Aerospace engineering Astronautics Civil engineering Solid Mechanics Multibody Systems and Mechanical Vibrations Aerospace Technology and Astronautics Civil Engineering
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	1 Online Input and State Estimation in Structural Dynamics -- 2 Modeling and Testing of the Anti-vibration Base for Michelangelo's Pieta' Rondanini -- 3 Estimation of Frequency and Damping of a Rotating System Using MEOT and Virtual Sensor Concept -- 4 Multibody/FEM Numerical Tool For HIL Scaled Offshore Wind Turbine -- 5 Detection and Identification of Firearms Upon Discharge Using Floor-Based Accelerometers -- 6 An Adaptive Markov Chain Monte Carlo

Method for Bayesian Finite Element Model Updating -- 7 Modal Parameters of Multiple-disk Shaft System From Multiple Reference Impact Test -- 8 Identification of Aerodynamic Properties of Bridge Decks in Arbitrary Motion -- 9 A Multiphysical Modelling Approach for Virtual Shaker Testing Correlated with Experimental Test Results -- 10 Characterizing the Dynamics of Systems Incorporating Surrogate Energetic Materials -- 11 Multimodal Damping of a Plate with a Passive Piezoelectric Network -- 12 State Estimation: A Model-based Approach to Extend Test Data Exploitation -- 13 Generation of Traveling Waves in a 2D Plate for Future Drag Reduction Manipulation -- 14 Surrogate Granular Materials for Modal Test of Fluid Filled Tanks -- 15 Dynamics of a Hydroelastic Oscillating Cylinder with Added Viscoelastic Damping for Passive Control of Vibrations -- 16 Dynamic Analysis of Fluid-filled Piping System on Flexible Foundation -- 17 Incremental Dynamic Analyses of Steel Moment Resisting Frames with Superelastic Viscous Dampers -- 18 Structural Control Using A Semiactive Friction Damper -- 19 Seismic Response of SMA Reinforced Shear Walls -- 20 Stability of MIMO Controllers for Floor Vibration Control -- 21 Extraction of Wave Dispersion Characteristics in a Discrete Chain Using Complex Modal Decomposition -- 22 Approximate general responses of multi-degree-of-freedom systems with parametric stiffness -- 23 Harmonic Forcing of a Two-Segment Elastic Rod -- 24 An Unified Framework for Studying Gear Dynamics Through Model Reduction Techniques -- 25 Applicationof the Harmonic Balance Method to Centrifugal Pendulum Vibration Absorbers -- 26 Development of Multi-Physics Dynamics Models for High-Frequency Large-Amplitude Structural Response Simulation -- 27 An Efficient Simulation Method for Large-Scale Systems with Local Nonlinearities -- 28 A Modal Superposition Method for the Analysis of Nonlinear Systems -- 29 Adaptive Harmonic Balance Methods, A Comparison.

Sommario/riassunto

Special Topics in Structural Dynamics, Volume 6. Proceedings of the 34th IMAC, A Conference and Exposition on Dynamics of Multiphysical Systems: From Active Materials to Vibroacoustics, 2016, the sixth volume of ten from the Conference brings together contributions to this important area of research and engineering. Th e collection presents early findings and case studies on fundamental and applied aspects of Structural Dynamics, including papers on: • Analytical Methods • Biological Systems • Dynamic Systems • Dynamics of Multi-Physical Systems • Structural Control • Simulation.