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| Nota di contenuto | Chapter 1. A Modification to Unified Matrix Polynomial Approach (UMPA) for Modal Parameter Identification -- Chapter 2. Orthogonal Projection-based Harmonic Signal Removal for Operational Modal Analysis -- Chapter 3. Identifying Mode Shapes of Turbo-machinery Blades using Principal Component Analysis and Support Vector Machines -- Chapter 4. Full-field Modal Analysis using a DSLR Camera -- Chapter 5. Enhancing Standard GVT Measurements with Digital Image Correlation -- Chapter 6. A Multi-View DIC Approach to Extract Operating Mode Shapes of Structures -- Chapter 7. Development of a |

Semi-Autonomous Drone for Structural Health Monitoring of Structures using Digital Image Correlation (DIC) -- Chapter 8. Experimental Examples for Identification of Structural Systems using Neural Network and DOF-Based Reduction Method -- Chapter 9. Active Control of Flexible Cylinders Undergoing Vortex-induced Vibrations using Piezo Stripe Actuators -- Chapter 10. Extracting Natural Frequencies of Layered Beams using a Continuous Variation Model and Modal Analysis -- Chapter 11. Dynamic Behavior of a Compliant Mechanism Driven by Stacked Piezoelectric Actuators -- Chapter 12. Detection of Natural Frequency and Mode Shape Correspondence using Phase-Based Video Magnification in Large-Scale Structures -- Chapter 13. Relating Vibration and Thermal Losses using the Damping Heat Coefficient -- Chapter 14. Predicting Geometric Tolerance Thresholds in a Five-Axis Machining Centre -- Chapter 15. Light Field Imaging of Three-Dimensional Structural Dynamics -- Chapter 16. Adaptive Observers for Structural Health Monitoring of High-rate, Time-varying Dynamic Systems -- Chapter 17. Probabilistic Robustness Analysis of an Actively Controlled Structure that Operates in Harsh and Uncertain Environments -- Chapter 18. Implementation of Piezoelectric Shape Sensors Using Digital Image Correlation -- Chapter 19. Variable Amplitude Fatigue Testing Apparatus and its Dynamical Characterization -- Chapter 20. An Efficient Likelihood-free Bayesian Computation for Model Selection and Parameter Estimation Applied to Structural Dynamics -- Chapter 21. Investigation on the Performance of a Velocity Feedback Control unit for Structural Vibration Control: Theory and Experiments -- Chapter 22. Experimental Implementation of a Nonlinear Feedback Controller for a Stroke Limited Inertial Actuator -- Chapter 23. Bio-Inspired Nonlinear Control of Artificial Hair Cells -- Chapter 24. Transient Excitation Suppression Capabilities of Electromagnetic Actuators in Rotor-shaft Systems -- Chapter 25. Active Vehicle Suspension with Weighted Multitone Optimal Controller - Considerations of Energy Consumption -- Chapter 26. Sliding Mode Controller for Vehicle Body Roll Reduction Using Active Suspension System -- Chapter 27. Applying Concepts of Complexity to Structural Health Monitoring.

Sommario/riassunto

Structural Health Monitoring Photogrammetry & DIC, Volume 6: Proceedings of the 36th IMAC, A Conference and Exposition on Structural Dynamics, 2018, the sixth volume of nine 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 Health Monitoring & Damage Detection, including papers on: Structural Health Monitoring Damage Detection System Identification Active Controls.