

1. Record Nr.	UNINA9910254222203321
Titolo	Structural Health Monitoring, Damage Detection & Mechatronics, Volume 7 : Proceedings of the 34th IMAC, A Conference and Exposition on Structural Dynamics 2016 // edited by Alfred Wicks, Christopher Niezrecki
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2016
ISBN	3-319-29956-5
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (VIII, 151 p. 130 illus., 102 illus. in color.)
Collana	Conference Proceedings of the Society for Experimental Mechanics Series, , 2191-5652
Disciplina	621
Soggetti	Mechatronics Security systems Buildings - Repair and reconstruction Buildings - Maintenance Security Science and Technology Building Repair and Maintenance
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 Development And Characterization of an ITO Nanocomposite Film Sensor for Damage Detection -- 2 Fiber Optic Sensor Arrays for Real-Time Virtual Instrumentation and Control of Flexible Structures -- 3 On the Output-only Vibration-based Damage Detection of Frame Structures -- 4 On the Influence of Sample Length and Measurement Noise on the Stochastic Subspace Damage Detection Technique -- 5 Quantification of Structural Damage with Self-Organizing Maps -- 6 Accuracy Enhancement Of A Device For Automated Underbridge Inspections -- 7 A Brief Overview of Mechatronics -- 7 Enhanced Vibration Damping by Means of a Negative Capacitance -- 8 Vehicle Tracking for Bridge Load Dynamics Using Vision Techniques -- 10 Model Based System Testing: Bringing Testing and Simulation Close Together -- 11 Time-varying System Identification Using a Hybrid Blind Source Separation Method -- 12 An Energy Measure for Mode Localization -- 13 Vibration Control on a Space Flexible Structure with

a PZT Stack Actuator Using Strain and MPPF Control -- 14 Multi-reference Time-Frequency Active Control of Vehicle Interior Road Noise -- 15 Wireless Monitoring of the Dynamic Behaviour of Railway Catenary Systems -- 16 Functional Series TARMA Models for Non-stationary Tool Vibration Signals Representation and Wear Estimation.

---

Sommario/riassunto

Structural Health Monitoring, Damage Detection & Mechatronics, Volume 7. Proceedings of the 34th IMAC, A Conference and Exposition on Dynamics of Multiphysical Systems: From Active Materials to Vibroacoustics, 2016, the seventh 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: • Structural Health Monitoring • Damage Detection • Numerical Modeling • Mechatronics • System Identification • Active Controls.

---