

1. Record Nr.	UNINA9910366603903321
Titolo	Dynamic Substructures, Volume 4 [[electronic resource]] : Proceedings of the 37th IMAC, A Conference and Exposition on Structural Dynamics 2019 // edited by Andreas Linderholt, Matthew S. Allen, Randall L. Mayes, Daniel Rixen
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2020
ISBN	3-030-12184-4
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (VIII, 186 p. 127 illus., 114 illus. in color.)
Collana	Conference Proceedings of the Society for Experimental Mechanics Series, , 2191-5644
Disciplina	620.1053
Soggetti	Statics Mechanics Mechanics, Applied Vibration Dynamical systems Dynamics Mechanical Statics and Structures Solid Mechanics Vibration, Dynamical Systems, Control
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Chapter1: Using Laser Vibrometry for Precise FRF Measurements in Experimental Substructuring -- Chapter2 A Priori Interface Reduction for Substructuring of Multistage Bladed Disks -- Chapter3: Using Hybrid Modal Substructuring with a Complex Transmission Simulator to Model an Electrodynamical Shaker -- Chapter4: Hybrid Substructure Assembly Techniques for Efficient and Robust Optimization of Additional Structures in Late Phase NVH Design: A Comparison -- Chapter5: Workpiece Coupling in Machine Tools using Experimental-analytical Dynamic Substructuring -- Chapter6: Mechanical Characterization and Numerical Modeling of High Density Polyethylene Pipes -- Chapter7: Study on Dynamic Stiffness Characteristic of Primary

Suspension for High-speed EMU -- Chapter8: Test-based Modeling, Source Characterization and Dynamic Substructuring of a Modular Industrial Demonstrator -- Chapter9: Development of a low Cost Automatic Modal Hammer for Applications in Substructuring -- Chapter10: Using SEMM to Identify the Joint Dynamics in Multiple Degrees of Freedom Without Measuring Interfaces -- Chapter11: Overview of Free Interface Substructuring Approaches for Systems with Arbitrary Viscous Damping in Dynamic Substructuring -- Chapter12: Joint Parameter Identification for Airplane Piping Systems and its Optimisation -- Chapter13: Vehicle Driveline Benchmarking to Support Predictive CAE Modeling Development -- Chapter14: A Proposal of Dynamic Behaviour Design Based on Mode Shape Tracing: Numerical Application to a Motorbike Frame -- Chapter15: Rapid Seismic Risk Assessment of Structures with Gaussian Process Regression -- Chapter16: Modeling Rail-vehicle Coupled Dynamics by a Time-varying Substructuring Scheme -- Chapter17: Planning of a Black-box Benchmark Structure for Dynamic Substructuring -- Chapter18: Study on The Technology of Reliable Life Prediction of Plate Heat Exchanger for Ship -- Chapter19: Real-Time Hybrid Substructuring Results of the Mars Pathfinder Parachute Deployment.

Sommario/riassunto

Dynamics of Coupled Structures, Volume 4: Proceedings of the 37th IMAC, A Conference and Exposition on Structural Dynamics, 2019, the fourth volume of eight 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 the Dynamics of Coupled Structures, including papers on: Methods for Dynamic Substructures Applications for Dynamic Substructures Interfaces & Substructuring Frequency Based Substructuring Transfer Path Analysis .
