1. Record Nr. UNINA9910983324103321

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Titolo	Dynamic Substructures, Vol. 4 : Proceedings of the 42nd IMAC, A Conference and Exposition on Structural Dynamics 2024 / / edited by Walter D'Ambrogio, Dan Roettgen, Maarten van der Seijs
Pubbl/distr/stampa	Cham : , : Springer Nature Switzerland : , : Imprint : Springer, , 2025
ISBN	87-438-0425-X 87-438-0057-2 3-031-68897-X
Edizione	[1st ed. 2025.]
Descrizione fisica	1 online resource (138 pages)
Collana	Conference Proceedings of the Society for Experimental Mechanics Series, , 2191-5652
Disciplina	624.171
Soggetti	Statics Dynamics Nonlinear theories Buildings - Design and construction Building materials Aerospace engineering Astronautics Mechanical Statics and Structures Applied Dynamical Systems Building Construction and Design Structural Materials Aerospace Technology and Astronautics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Validated Finite Element Models Representing Components Building up the Technical Division’s Substructuring Benchmark Structure. -- 2. A Characterization of the Uncertainty in Force-Control Testing for Aerospace Applications -- 3. Thoughts on Using Sparse Inverse Solutions in Transfer Path Analysis -- 4. Estimating Linear Joint Stiffness and Damping using a Frequency-Based Optimization Framework and the Emerging Concept of DyDis -- 5. Linear Joint

Identification for Frictional Rotor Shaft-to-Hub Connections using Frequency-Based Substructuring -- 6. Investigation of Isolated Branches in Nonlinear Oscillators Using Real-Time Hybrid Testing -- 7. Effects of Rarefied Atmosphere on Radiation Damping in an Aluminum Euler Beam -- 8. Different displacement reduction spaces for the use in admittance-based TPA methods -- 9. Expansion Techniques in the Modal Domain: Practical Implementation of M-SEMM and Comparative Study with SEREP -- 10. Comparing Frequency-based and Modal-based Substructuring on the Dynamic Substructuring Round Robin Benchmark -- 11. Nonlinear Subcomponent Attachments for the Technical Division on Dynamic Substructuring Benchmark Structure -- 12. pyFBS: A Python Package for Frequency Based Substructuring -- 13. Inverse Source Estimation Tools in SDynPy, an Open-Source Python Package -- 14. A Genetic Algorithm-Based Approach for Designing a Fixture that Preserves the Desired Dynamics of a Connecting Part -- 15. Modeling Bolted Joints in the S4 Beam at Various Preloads with Discrete Iwan Elements.

Sommario/riassunto

Dynamics of Coupled Structures, Volume 4: Proceedings of the 42nd IMAC, A Conference and Exposition on Structural Dynamics, 2024, the fourth 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 the Dynamics of Coupled Structures, including papers on: Linear Joints, Nonlinear Joints and Coupling Modal and Frequency Based Substructuring Round Robin Test Bed on Dynamic Substructuring Transfer Path Analysis and Force Estimation Interface Dynamics.