1. Record Nr. UNINA9910768456203321 Autore Harvie Julie **Titolo** Dynamic Environments Testing, Volume 7: Proceedings of the 41st IMAC, A Conference and Exposition on Structural Dynamics 2023 / / edited by Julie Harvie Cham:,: Springer Nature Switzerland:,: Imprint: Springer,, 2024 Pubbl/distr/stampa **ISBN** 3-031-34930-X Edizione [1st ed. 2024.] Descrizione fisica 1 online resource (162 pages) Collana Conference Proceedings of the Society for Experimental Mechanics Series, , 2191-5652 624.17 Disciplina Soggetti **Dynamics** Nonlinear theories Quantum physics Statics Optical measurements Metrology Materials - Analysis **Applied Dynamical Systems** Quantum Measurement and Metrology Mechanical Statics and Structures **Optical Metrology** Materials Characterization Technique Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Designing Accelerated Vibration Tests using Model-Based Equivalent Damage Prediction -- , Producibility of Time Domain Test Specification of Resonant Plate Shock Test -- , A Method to Expand Sparse Set

Acceleration Data to Full Set Strain Data -- , Using Modal Acceleration

Equivalencing of Sine-Sweep and Random Vibration Specification with Considerations of Nonlinear Statistics -- , Evaluation of a Multiaxis Shock Fixture Concept -- , Operational Analysis of a Structure with Intermittent Impact -- , Finite Element Simulation of Electromagnetic

to Compare Two Environments of an Aerospace Component --,

Shaker for Environmental Test --, Rapid, Approximate Multi-Axis Vibration Testing --, Operational Replication of Strain Responses during MIMO Random Control Tests --, Using Cell Phone Videos to Diagnose Machinery Faults --, Influence of Shaker Limitations on the Success of MIMO Environment Reconstruction --, A MIMO Time Waveform Replication Control Implementation --, Demonstration of Output Weighting in MIMO Control --, Shaker Capability Estimation Through Experimental Dynamic Substructuring.

## Sommario/riassunto

Dynamic Environments Testing, Volume 7: Proceedings of the 41st IMAC, A Conference and Exposition on Structural Dynamics, 2023, 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 Dynamic Environments Testing including papers on: Vibration Testing Shock Testing Multi-Axis Shaker Testing Test Fixture Design Dynamic Environment Definition Specifications for Acceptance Testing.