1. Record Nr. UNINA9910254222603321 Topics in Modal Analysis & Testing, Volume 10: Proceedings of the Titolo 34th IMAC, A Conference and Exposition on Structural Dynamics 2016 / / edited by Michael Mains Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa **ISBN** 3-319-30249-3 Edizione [1st ed. 2016.] Descrizione fisica 1 online resource (VIII, 419 p. 333 illus., 302 illus. in color.) Collana Conference Proceedings of the Society for Experimental Mechanics Series, , 2191-5644 624.1762 Disciplina Soggetti Vibration Dynamical systems **Dynamics** Acoustical engineering Mechanics Mechanics, Applied Vibration, Dynamical Systems, Control **Engineering Acoustics** Solid Mechanics 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 Using Singular Value Decomposition to Estimate Frequency Response Functions -- 2 Curve Fitting Analytical Mode Shapes to Experimental Data -- 3 Acceleration Measurement Optimization: Mounting Considerations and Sensor Mass Effect -- 4 Experimental Study on the Impact of the Number of Laminas on the Dynamics Behavior of an Electric Machine Stator -- 5 Normalization of Complex Mode Shapes by Truncation of Alpha-Polynomial -- 6 What is Normal About Normal Modes? -- 7 Generalized Craig-Bampton Method Using Robin Boundary Conditions -- 8 Force Reconstruction Using Force Gauges and Accelerometers -- 9 Experimental and Numerical Elastodynamic Analysis of Compressed Open Thin-walled Beams -- 10 Dynamic

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## Sommario/riassunto

Topics in Modal Analysis & Testing, Volume 10. Proceedings of the 34th IMAC, A Conference and Exposition on Dynamics of Multiphysical Systems: From Active Materials to Vibroacoustics, 2016, the tenth 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: • Modal Analysis, Measurements & Parameter Estimation • Basics of Modal Analysis • Additive Manufacturing & Modal Testing of Printed Parts • Modal Analysis & Model Updating • Modal Testing Methods.