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Titolo	Advances in Acoustics and Vibration II : Proceedings of the Second International Conference on Acoustics and Vibration (ICAV2018), March 19-21, 2018, Hammamet, Tunisia // edited by Tahar Fakhfakh, Chafik Karra, Slim Bouaziz, Fakher Chaari, Mohamed Haddar
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Descrizione fisica	1 online resource (335 pages)
Collana	Applied Condition Monitoring, , 2363-698X ; ; 13
Disciplina	620.3
Soggetti	Vibration Dynamical systems Dynamics Acoustical engineering Engineering design Quality control Reliability Industrial safety Vibration, Dynamical Systems, Control Engineering Acoustics Engineering Design Quality Control, Reliability, Safety and Risk
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Part 1: Dynamics and fault detection of machinery -- L-kurtosis and Improved Complete Ensemble EMD in early fault detection under variable load band speed -- Dynamic behavior of back to back planetary gear in presence of pitting defects -- Losses in Thrust Ball Bearings Lubricated with Axle Gear Oils -- Dynamic Behavior and Stability of a Flexible Rotor -- Operational Modal Analysis for a half vehicle model -- Detecting sound hard cracks in isotropic inhomogeneities -- On the research of extra characteristic frequencies

of a planetary gearbox -- Part 2: Mutiphysics systems dynamics -- Analytical based approach for vibration analysis in Modelica: application to the bridge crane system.

Sommario/riassunto

The book provides readers with a snapshot of recent research and industrial trends in field of industrial acoustics and vibration. Each chapter, accepted after a rigorous peer-review process, reports on a selected, original piece of work presented and discussed at the Second International Conference on Acoustics and Vibration (ICAV2018), which was organized by the Tunisian Association of Industrial Acoustics and Vibration (ATAVI) and held March 19-21, in Hammamet, Tunisia. The contributions cover advances in both theory and practice in a variety of subfields, such as: smart materials and structures; fluid-structure interaction; structural acoustics as well as computational vibro-acoustics and numerical methods. Further topics include: engines control, noise identification, robust design, flow-induced vibration and many others. This book provides a valuable resource for both academics and professionals dealing with diverse issues in applied mechanics. By combining advanced theories with industrial issues, it is expected to facilitate communication and collaboration between different groups of researchers and technology users.
