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Titolo	Advances in Acoustics and Vibration IV : Proceedings of the Fourth International Conference on Acoustics and Vibration (ICAV2022), December 19-21, 2022, Sousse, Tunisia // edited by Ali Akrouf, Moez Abdennadher, Nabih Feki, Mohamed Slim Abbes, Fakher Chaari, Mohamed Haddar
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ISBN	3-031-34190-2
Edizione	[1st ed. 2023.]
Descrizione fisica	1 online resource (489 pages)
Collana	Applied Condition Monitoring, , 2363-6998 ; ; 22
Disciplina	620.2
Soggetti	Machinery Dynamics Nonlinear theories Mathematical physics Computer simulation Acoustics Machinery and Machine Elements Applied Dynamical Systems Computational Physics and Simulations
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	On the vibrations of functionally gradient porous shells -- Effects of the mechanical characteristics on the dynamic behavior of a bolted structure under transient excitation -- Experimental investigation on the dynamics of a hydraulic dual tube automobile strut damper -- Numerical study of machining vibration effect on machined surface roughness in orthogonal milling -- On Vibration Effect on the electro-thermal mechanical behavior of the BGA solder joints -- Large deflection of smart magneto-electro-elastic cylindrical shell -- Analysis of nonlinear behavior of smart MEE composite plate -- Non-destructive identification of damage mechanisms in unidirectional composites by acoustic emission and machine learning-based clustering --

Mechanical behavior and damage of advanced iron-based Metal Matrix Composite under shear.

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 Fourth International Conference on Acoustics and Vibration (ICAV2022), which was organized by the Tunisian Association of Industrial Acoustics and Vibration (ATAVI) and held in hybrid format on December 19–21, 2022, in and from Sousse, Tunisia. The contributions cover advances in both theory and practice in a variety of subfields, such as structural and machine dynamics and vibrations, fault diagnosis and prognosis, nonlinear dynamics, and vibration control of mechatronic systems. Further topics include fluid–structure interaction, computational vibro-acoustics, vibration field measurements, and dynamic behavior of materials. 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.
