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Soggetti	Microtechnology Microelectromechanical systems Mechanics, Applied Materials - Analysis Microsystems and MEMS Engineering Mechanics Characterization and Analytical Technique
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Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Chap1. Nanomechanics Instabilities and TeraHertz Vibrations: From Geochemical Evolution to Fracto-Emission Seismic Precursors -- Chap2. Femtosecond Laser Machining of Micro-tensile Specimens for High Throughput Mechanical Testing -- Chap3. PVDF-TrFE Electroactive Polymer Based Micro-Electro-Mechanical Systems (MEMs) Structures -- Chap4. Novel Image Correlation Based Techniques for Mechanical Analysis of MEMS -- Chap5. Interphase Mechanics in Fatigued Carbon Fiber Composite Materials -- Chap6. Energy Balance during Elettrolysis and Cavitation Experiments -- Chap7. Characterizing Traction-Separation Relations of TSV/SI Interfaces by Nanonindentation -- Chap8. Size Effects in Single-crystal Metallic Micro- and Nanocubes -- Chap9. An Experimental Study to Guide AFM - Based TBN of Nanochannels -- Chap10. Hybrid Nanomaterials for Flexible Electronics Interconnects -- Chap11. Characterization of a

MEMS Electrostatic Microgripper for Micromanipulation and Sensing --  
Chap12. Dynamic Characterization of a High-resolution MEMS Force  
Sensor for Middle-ear Mechanics.

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Sommario/riassunto

Micro-and Nanomechanics, Volume 5 of the Proceedings of the 2017 SEM Annual Conference & Exposition on Experimental and Applied Mechanics, the fifth volume of nine from the Conference, brings together contributions to this important area of research and engineering. The collection presents early findings and case studies on a wide range of areas, including: MEMS & Energy Harvesting 1D & 2D Materials/Fabrication Micro/Nano Microscopy Techniques Nanomechanics Flexible & Stretchable Electronics Interfaces & Adhesion.

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