Record Nr. UNINA9910299876003321 Micro and Nanomechanics, Volume 5: Proceedings of the 2017 Annual Titolo Conference on Experimental and Applied Mechanics / / edited by LaVern Starman, Jenny Hay Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa **ISBN** 3-319-63405-4 Edizione [1st ed. 2018.] 1 online resource (VII, 81 p. 78 illus., 43 illus. in color.) Descrizione fisica Collana Conference Proceedings of the Society for Experimental Mechanics Series, , 2191-5652 620.1186 Disciplina Soggetti Microtechnology Microelectromechanical systems Mechanics, Applied Materials - Analysis Microsystems and MEMS **Engineering Mechanics** Characterization and Analytical Technique Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Includes bibliographical references at the end of each chapters. Nota di bibliografia 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

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

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.