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Nota di contenuto	From the Contents: KEYNOTE: Scale Independent Approach to Deformation and Fracture -- Classical Optical Interferometry for Strain Measurements -- KEYNOTE: Recent Advances in Holographic Strain and Stress Measurement -- Digital Holographic Microscopy by Mirau Interferometric Objective -- Digital Holographic Otoscope for Measurements of the Human Tympanic Membrane In-vivo -- KEYNOTE: Optical Fourier Transforms in the Nano Range -- 3D/4D Strain Mapping Using In-situ X-ray Microtomography -- Dynamic Thermal Deformation Measurement Technique for Large-scale High Temperature Piping -- Hybrid Characterization of Laminated Wood With ESPI and Optimization Methods -- Simultaneous Measurement of Plate Natural Frequencies and Vibration Mode Shapes Using ESPI -- Damage Assessment in Composite Materials for Remnant Life Prediction.

Imaging Methods for Novel Materials and Challenging Applications, Volume 3: Proceedings of the 2012 Annual Conference on Experimental and Applied Mechanics, the third volume of seven from the Conference, brings together 62 contributions to this important area of research and engineering. The collection presents early findings and case studies on fundamental and applied aspects of Experimental and Applied Mechanics, including papers on: Role of optical interferometry in advancement of material characterization Three-dimensional imaging and volumetric correlation Digital holography and experimental mechanics Digital image correlation Metrology and displacement measurement at different scales Optical methods for dynamic tests Optical methods for and with MEMS and NEMS Thermomechanics and infrared imaging.
