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Sommario/riassunto

This critical collection examines a range of optical methods ranging from traditional photoelasticity and interferometry to more recent DIC and DVC techniques, as presented in early findings and case studies from the Proceedings of the 2013 Annual Conference on Experimental and Applied Mechanics. The collection includes papers in the following general technical research areas: • Optical metrology and displacement measurements at different scales • Digital holography and experimental mechanics • Optical measurement systems using polarized light • Surface topology • Digital image correlation • Optical methods for MEMS and NEMS • Three-dimensional imaging and volumetric correlation • Imaging methods for thermomechanics applications • 3D volumetric flow measurement • Applied photoelasticity • Optical residual stress measurement techniques • Advances in imaging technologies Advancement of Optical Methods in Experimental Mechanics: Proceedings of the 2013 Annual Conference on Experimental and Applied Mechanics is the third volume of eight from the Conference.

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