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Nota di contenuto	From the Contents: Correlation of Structural Strain to Tip Vorticity and Lift for a MAV Pliant Membrane Wing -- Deformation Mapping at the Microstructural Length Scale -- Molecular Tailoring of Interfacial Adhesion Using Self-assembled Monolayers -- Micromechanical Characterization of Ductile Damage in DP Steel -- MEMS Device for Fatigue Testing 25 Micrometer Thick Aluminum Specimens -- High Confidence Level Calibration for AFM Based Fracture Testing of Nanobeams -- High Strain Rate Characteristics of Fiber Bragg Grating Strain sensors -- Dynamic Shape and Strain Measurements of Rotating Tire in Time-series -- Measurement of Metallic Adhesion Force-to-Elongation Profile Under High Separation-Rate Conditions -- Prediction of Constraint Parameters Along the 3D Crack Front Under Negative Biaxial Loadings -- Role of Viscoelasticity in Predicting the Shape

Experimental and Applied Mechanics, Volume 4: Proceedings of the 2012 Annual Conference on Experimental and Applied Mechanics, the fourth volume of seven from the Conference, brings together 54 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: Fracture & Fatigue Microscale & Microstructural Effects in Fatigue & Fracture Material Applications Composite Characterization Using Digital Image Correlation Techniques Multi-Scale Simulation and Testing of Composites Residual Stress Inverse Problems/Hybrid Methods Nano-Composites Microstructure Material Characterization Modeling and Uncertainty Quantification Impact Behavior of Composites.
