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Nota di contenuto	From the Contents: Effect of Crystallite Orientation on Nanomechanical Properties of a Nanostructured poly(KAMPS)/aragonite Composite -- Characterization of the Mechanical Behavior of Sunflower Stem for Biocomposite Applications -- Long-range Mechanical Force Enables Self-assembly of Epithelial Tubules -- Effects of Membrane Composition and Cytoskeletal Proteins on Membrane Mechanics -- Interfacial Fracture Toughness of Nacre -- New Insight into the Toughening Mechanisms of Nacre -- Thermal Analyses of Dental Ceramic Restorations -- Visualization of Micro-cracks in Compact Bovine Bone -- KEYNOTE: Humanlike Robots - Synthetically Mimicking Humans -- Porous Hydroxyapatite-polyhydroxybutyrate Composites Fabricated by a Novel Method via Centrifugation -- Isolation of Collagen From Cortical Bovine Bone for Preparation of Porous Collagen Sponges.

Sommario/riassunto

Mechanics of Biological Systems and Materials, Volume 5: Proceedings of the 2012 Annual Conference on Experimental and Applied Mechanics, the fifth volume of seven from the Conference, brings together 31 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: Biological Materials & Mechanics Cell Mechanics Mechanics of Biomimetic Materials Mechanics of Brain Tissues and Structures Mechanics of Bone and Related Materials Multi-Scale Mechanics of Natural Fibers Indentation Methods in Soft Materials Imaging Methods in Biological Systems and Materials Mechanics of Tissue Damage Mechanics of Soft Materials and Tissues.
