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Titolo	Mechanics of Biological Systems and Materials, Volume 7 : Proceedings of the 2014 Annual Conference on Experimental and Applied Mechanics // edited by Francois Barthelat, Chad Korach, Pablo Zavattieri, Barton C. Prorok, K. Jane Grande-Allen
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Collana	Conference Proceedings of the Society for Experimental Mechanics Series, , 2191-5652
Disciplina	571.4/3 620.112
Soggetti	Biomedical engineering Biomaterials Mechanics, Applied Biomedical Engineering and Bioengineering Engineering Mechanics
Lingua di pubblicazione	Inglese
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapter.
Nota di contenuto	In Vitro Complex Shear Modulus of Bovine Muscle Tissue -- A Camera-based Experimental Method for Mechanical Test on Patellar Tendons -- Thin-shell Behavior of Mammalian Tympanic Membrane Studied by Digital Holography -- Controlling Abalone Shell Architecture With Temperature -- The Modeling of Time Dependent Mechanical Properties of Cervine Enamel -- Development of Tissue Surrogates for Photoelastic Strain Analysis of Needle Insertion -- Polymer Gels for Defense Applications -- Development of a Microloading Platform for in Vitro Mechanotransduction Studies -- Development of a Multi-Strain Profile for Cellular Mechanotransduction Testing -- Pull-off Adhesion Measurements on C. Elegans -- A Fractional Order Model for Local Electric Fields in Tissues -- Simulation of Atherosclerotic Plaque

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Sommario/riassunto

Mechanics of Biological Systems and Materials, Volume 7: Proceedings of the 2014 Annual Conference on Experimental and Applied Mechanics, the seventh volume of eight 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: Soft Tissues Mechanics Natural Materials & Bio-Inspiration Tissue Engineering Cells Mechanics.

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