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Nota di contenuto	Introduction to Human Tissues -- Mechanical Characterization Techniques -- Applications of Human Tissue Properties -- Skin -- Muscles -- Connective Tissues -- Tissues in Functional Organs -- Challenges and Future Opportunities -- Tissues in Functional Organs- High Stiffness -- Challenges and Future Opportunities.
Sommario/riassunto	This monograph brings forth biomechanical research methods and outcomes on human tissue experiments such as those of the brain and the heart under a single umbrella. Different mechanical characterization techniques employed in human tissue property estimation are presented in detail. The contents also focus on a hyperelastic constitutive model (e.g., Mooney-Rivlin, Ogden) for both isotropic and anisotropic tissue characterization. It also discusses energy dissipation in soft tissues and associated viscoelasticity. Human tissues, including skin, muscles, connective tissues, and tissues in all functional organs are listed and their mechanical properties are presented in detail. These tissue properties are indispensable for computational modeling of biological systems, validation of biomechanical tissue testing, medical simulation through development of artificial phantoms and surrogates, and testing of medical devices

and interventions. This book will serve as a key reference for research in tissue engineering & biomedical engineering, medical simulation, biomechanics, finite element modeling of biological systems, biomaterials, biotechnology, implant and medical device development, and healthcare wearables. .
