Record Nr.	UNINA9910299929503321
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Titolo	The Biomechanics of Impact Injury : Biomechanical Response, Mechanisms of Injury, Human Tolerance and Simulation / / by Albert I. King
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2018
ISBN	3-319-49792-8
Edizione	[1st ed. 2018.]
Descrizione fisica	1 online resource (LVI, 662 p. 526 illus., 249 illus. in color.)
Disciplina	612.01441
Soggetti	Biomedical engineering
	Biophysics
	Biological physics
	Orthopedics
	Biomedical Engineering and Bioengineering Biological and Medical Physics, Biophysics
	Conservative Orthopedics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Chapter1. Introduction Chapter2. Basics of the Biomechanics of Brain Injury Chapter3. Basics of the Biomechanics of Brain Injury Chapter4. Basics of the Biomechanics of Brain Injury Chapter5.Basics of the Biomechanics of Brain Injury Chapter6. Basics of the Biomechanics of Brain Injury Chapter7.Basics of the Biomechanics of Brain Injury Chapter8.Basics of the Biomechanics of Brain Injury Chapter9.Basics of the Biomechanics of Brain Injury Chapter9.Basics of the Biomechanics of Brain Injury Chapter9.Basics of Facet Loading on the Lumbar Spine Chapter10. Biomechanics of Facet Loading on the Lumbar Spine Chapter12. Impact Biomechanics of the Abdomen Chapter13.Impact Biomechanics of the Abdomen Chapter14.Impact Biomechanics of the Lower Extremities Chapter15. Impact Biomechanics of the Foot Chapter16.Side Impact Chapter17.Side Impact Chapter18. Biomechanics of Automotive Safety Restraints Chapter19. Biomechanics of Sports Injuries Chapter20. Epilog.

This text acquaints the reader on the biomechanics of injury to the human body caused by impact and the use of computer models to simulate impact events. It provides a basic understanding of the biomechanics of the injuries resulting from the impact to the head, neck, chest, abdomen, spine, pelvis and the lower extremities, including the foot and ankle. Other topics include side impact, carpedestrian impact, effectiveness of automotive restraint systems and sports-related injuries. Featuring problems and PowerPoint slides for lectures, the volume is ideal for students in graduate programs in biomechanics, as well as practicing engineers, and researchers in the life sciences concerned with orthopedics.