Robert LeMoyne

Advances for Prosthetic Technology

From Historical Perspective to Current Status to Future Application

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Advances for Prosthetic Technology 2016: From Historical Perspective to Current Status to Future Application (Hardback)

By Robert LeMoyne

Springer Verlag, Japan, Japan, 2016. Hardback. Book Condition: New. 2016 ed.. 235 x 155 mm. Language: English . Brand New Book. This book focuses on the advances in transtibial prosthetic technology and targets research in the evolution of the powered prosthesis such as the BiOM, which was derived from considerable research and development at the Massachusetts Institute of Technology. The concept of the book spans the historical evolution of prosthetic applications from passive to new and futuristic robotic prosthetic technologies. The author describes the reasons for amputation, surgical procedures, and an historical perspective of the prosthesis for the lower limb. He also addresses the phases and sub-phases of gait and compensatory mechanisms arising for a transtibial prosthesis and links the compensatory mechanisms to long-term morbidities. The general technologies for gait analysis central to prosthetic design and the inherent biomechanics foundations for analysis are also explored. The book reports on recent-past to current-term applications with passive elastic prostheses. The core of the book deals with futuristic robotic prostheses including their function and major subsystems, such as actuator technology, state machine control, and machine learning applications. Finally, the envisioned future trends in the prosthetic technology space are presented.



Reviews

Very useful to any or all group of men and women. It is writter in basic words instead of difficult to understand. I realized this ebook from my i and dad recommended this publication to understand.

-- Althea Fahey MD

This pdf is fantastic. It typically is not going to price too much. You will not truly feel monotony at at any time of your own time (that's what catalogs are for about if you request me).

-- Leslie Reinger