Special Issue

Exoskeletal Prosthetics: Recent Developments, Innovations and Challenges

Message from the Guest Editors

Research in prosthetic technologies and fitting processes have made enormous progress in recent years, triggered by the “technology boom” in the fields of microelectromechanical and biomechatronics, among other things. These include robotics, closed-loop-systems, the increased use of artificial intelligence, new methods in pattern recognition, smart materials, bionic strategies in amputation surgery, and the involvement of man–machine interfaces (e.g., osseointegrated skeletal prosthetic fittings). The goal is to create the most natural, intuitive prosthetic control possible, as well as the automated recognition and implementation of a reliable feedback mechanism of prosthetic and environmental conditions to the user at the maximum possible comfort relieving amputation-associated pain. This Special Issue aims to provide a medium for the presentation and dissemination of current and original contributions to the field of innovations in exoskeletal prosthetic care in this interdisciplinary research field embracing medical and technological approaches representing promising advances in amputee care.

Guest Editors

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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