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Robots in Healthcare: Design, Control and Applications

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Deadline for manuscript
submissions:

closed (15 November 2023)

Message from the Guest Editor

Dear Colleagues,

The future trends in robotics technology, the increasing number of patients (due to stroke, surgery, etc.), and the need to serve more patients mean that medical robots must operate more flexibly and in customizable configurations. For example, an upper limb rehabilitative robot is expected to perform endpoint and joint-based exercises as patients go through different recovery stages.

New methods are required for the maneuvering of robots, operation optimization, performance monitoring, and risk minimization. In addition, sophisticated control algorithms using AI and machine learning need to be deployed in robot control to perform more intelligent operations.

This Special Issue aims to gather cutting-edge research contributions from the entire field of healthcare robotics, including orthotics and prosthetics for upper limbs, lower limbs, and the full body for rehabilitation, surgery robots, mobile robots, service robots, and assistive robots.



mdpi.com/si/139136

Special Issue



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Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications.

Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided.

There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

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