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Flexible Mechanisms in Robot Design and Application

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Message from the Guest Editors

In recent years, there has been a notable shift in interest from robots and automation equipment being formed exclusively from solid structures and rigid materials. Instead, there is increased interest in forming machines from flexible and soft materials and using variable stiffness and compliant actuation to form more flexible mechanisms. There are a range of advantages offered by flexible mechanisms including increased safety when operating alongside human, enhanced deployability, energy storage, and other improved abilities compared to traditional robot designs.

This Special Issue aims to discuss the state of the art in the design of flexible robotic mechanisms. It will also include papers highlighting the application of flexible robot systems, particularly where they provide advantages when compared to more traditional mechanism designs.

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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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