Special Issue

Recent Advances in Compliant Mechanisms

Message from the Guest Editor

Compliant mechanisms utilize the elastic properties of materials to create desired output motion and offer significant advantages in simplifying design, improving efficiency, and enhancing accuracy over traditionally designed rigid body mechanisms. This Special Issue is dedicated to exploring the latest developments in the design, application, modeling, and manufacturing of complex compliant mechanisms. Their application areas cover a wide range, including, but not limited to, energy harvesting, upper and lower body exoskeletons, biomimetic locomotive robots, soft robots, high-speed and precision positioning stage-based mechanisms, lamina emergent and folding mechanisms, and open-chain and closed-chain compliant mechanisms. The Special Issue highlights advancements in the kinetostatic modeling of small and large deflecting compliant mechanisms, as well as the derivation of mathematical models for the dynamic modeling of complex compliant mechanisms. Additionally, there have been substantial improvements in the manufacturing techniques used for compliant mechanisms to enhance their overall performance.

Guest Editor

Dr. Ayse Tekes
Mechanical Engineering Deprtment, Kennesaw State University, Marietta, GA, USA

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Machines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
machines@mdpi.com

mdpi.com/journal/machines

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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.

Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso
CISE - Electromechatronic Systems Research Centre, University of Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

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