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Robotics and Vibration Mechanics

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Message from the Guest Editors

Robotics and autonomous systems

The growing interest and development of collaborative and lightweight robots and mechanisms have led to the study and investigation of several aspects of both robotic systems and mechanical vibrations strictly related between them. Indeed, compliance and flexibility may lead to undesired mechanical vibrations, especially when lightweight systems performing high-speed operations are considered. Therefore, a proper structural design, trajectory planning, and control architecture are required to correctly steer the system during operation.

This Special Issue will bring researchers together to present recent advances and technologies in the fields of robotics and vibration mechanics. Suitable topics include, but are not limited to, the following:

Mechanical vibrations and noise
Kinematic and dynamic modeling of robotic systems
Path and trajectory planning
Automatic control systems
Flexible multibody systems
Collaborative robotics
Design and optimization of robotic and mechatronic systems
Mechanisms design
Manufacturing systems











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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

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