# **Special Issue**

## Robotics and Vibration Mechanics

### Message from the Guest Editors

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: Robotics and autonomous systemsMechanical vibrations and noiseKinematic and dynamic modeling of robotic systemsPath and trajectory planningAutomatic control systemsFlexible multibody systemsCollaborative roboticsDesign and optimization of robotic and mechatronic systemsMechanisms designManufacturing systems

### **Guest Editors**

Prof. Dr. Alessandro Gasparetto

Dr. Lorenzo Scalera

Dr. Ilaria Palomba

Deadline for manuscript submissions closed (31 May 2021)



# Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



mdpi.com/si/48914

Applied Sciences MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 applsci@mdpi.com

mdpi.com/journal/ applsci





# Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.3



<u>applsci</u>



## About the Journal

### 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

Prof. Dr. Giulio Nicola Cerullo Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy

#### **Author Benefits**

#### **Open Access:**

free for readers, with article processing charges (APC) paid by authors or their institutions.

### High Visibility:

indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

#### Journal Rank:

JCR - Q1 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)