

## Special Issue

# Robotics and Control: State of the Art

### Message from the Guest Editors

Dear colleagues, As one of the most promising technologies of the future, robotics has become very important in industrial applications, household services, and healthcare. Robotics is dealing with research and development in a few interdisciplinary areas, such as design optimization, kinematics, dynamics, motion planning, control, sensors, and machine intelligence. The control system is the core in the development and applications of robotic systems. The extent of research activities in robotics and control has led to many significant achievements that can be shared with the research community. The aim of this Special Issue is to collect original papers concerned with the theory and application of various types of robotic systems and control. Theoretical, numerical, and experimental contributions on robotics and control are welcome in this Special Issue.

---

### Guest Editors

Dr. Puren Ouyang

Department of Aerospace Engineering, Ryerson University, 350 Victoria St, Toronto, ON M5B 2K3, Canada

Prof. Dr. Zhuming Bi

Department of Civil and Mechanical Engineering, Purdue University Fort Wayne, Fort Wayne, IN 46805, USA

---

### Deadline for manuscript submissions

closed (30 June 2022)



## Actuators

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 3.9



[mdpi.com/si/65139](https://mdpi.com/si/65139)

*Actuators*

MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[actuators@mdpi.com](mailto:actuators@mdpi.com)

[mdpi.com/journal/  
actuators](https://mdpi.com/journal/actuators)





# Actuators

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.2  
CiteScore 3.9



[mdpi.com/journal/  
actuators](https://mdpi.com/journal/actuators)



## About the Journal

### Message from the Editor-in-Chief

We are just entering the Next Wave of Technology (NWT) where actuators will play the same role as the computer chip did for computers/social media approximately four decades ago. Just in the U.S., production of \$1 trillion year of electromechanical systems (vehicles, orthotics, manufacturing cells, freight trains, aircraft, etc.) will be impacted by the NWT, all driven by actuators. Five key trends can be found for the future perspectives: “Performance to Reliability”, “Hard to Soft”, “Macro to Nano”, “Homo to Hetero” and “Single to Multi functional”. We invite papers that primarily impact these economic sectors; those illustrating basic scientific principles are also welcome.

---

### Editor-in-Chief

Prof. Dr. Kenji Uchino  
Emeritus Academy Institute, The Pennsylvania State University,  
University Park, PA 16802, USA

---

### Author Benefits

#### Open Access:

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

#### High Visibility:

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

#### Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q2  
(Control and Optimization)