

## Special Issue

# Advanced Theory and Application of Magnetic Actuators

### Message from the Guest Editors

Magnetic actuators are actuators which use magnetic force or Lorentz force, and are widely used in industry, defense, aviation, aerospace, and daily life. Magnetic actuators integrate electromagnetism, electronic technology, superconducting and cryogenic technology, control engineering, signal processing, mechanics, and dynamics. They have attracted extensive attention from scholars at home and abroad, thus representing a research hotspot in related fields. In order to solve the basic scientific problems and key technical problems related to magnetic actuators, and gather the frontier achievements of magnetic actuators and vibration control, *Actuators* has set up a Special Issue, titled "Advanced Theory and Application of Magnetic Actuators". This Special Issue also cooperates with the 10th Chinese Symposium on Magnetic Levitation Technology and Vibration Control, held on 29 July–1 August 2022, Shenyang, China. Authors of outstanding papers on topics related to the Special Issue presented at the conference are invited to submit extended versions of their work to this Special Issue.

### Guest Editors

Prof. Dr. Suyuan Yu

Prof. Dr. Jin Zhou

Prof. Dr. Feng Sun

Dr. Ming Zhang

### Deadline for manuscript submissions

closed (15 December 2022)



## Actuators

an Open Access Journal  
by MDPI

Impact Factor 2.3  
CiteScore 4.3



[mdpi.com/si/126757](https://mdpi.com/si/126757)

*Actuators*  
Editorial Office  
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 2.3  
CiteScore 4.3



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



## About the Journal

### Message from the Editorial Board

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.

---

### Editors-in-Chief

Prof. Dr. Kenji Uchino

Emeritus Academy Institute, The Pennsylvania State University,  
University Park, PA 16802, USA

Prof. Dr. Norman M. Wereley

Department of Aerospace Engineering, University of Maryland, 3179J  
Martin Hall, College Park, MD 20742, 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 - Q1  
(Control and Optimization)