



Advanced Theory and Application of Magnetic Actuators—2nd Edition

Guest Editors:

Prof. Dr. Zhiqiang Long

Prof. Dr. Feng Sun

Prof. Dr. Jin Zhou

Prof. Dr. Suyuan Yu

Dr. Ran Zhou

Dr. Chuan Zhao

Deadline for manuscript
submissions:

closed (20 May 2025)

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. 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 created a Special Issue, titled "Advanced Theory and Application of Magnetic Actuators", which aims to address all types of designed actuators using magnetic force or Lorentz force.

Following the success of the first volume of this Special Issue, we decided to broaden the scope and compile a second volume for the publication of all types of manuscripts (reviews, perspectives, and research papers).

This Special Issue also cooperates with the 11th Chinese Symposium on Magnetic Levitation Technology and Vibration Control (<https://csve.kejie.org.cn/meeting/CSMLVC11/>), held on 4 August 2023–7 August 2023, Changsha, China. Authors of high-quality papers on topics related to this Special Issue presented at the conference are invited to submit extended versions of their work to this Special Issue.





an Open Access Journal by MDPI

Editors-in-Chief

Prof. Dr. Kenji Uchino

Electrical Engineering, Emeritus
Academy Institute, 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

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.

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)

Contact Us

Actuators Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/actuators
actuators@mdpi.com
[X@Actuators_MDPI](https://twitter.com/Actuators_MDPI)