

Special Issue

Piezoelectric Actuators and Ultrasonic Motors: Future Perspectives

Message from the Guest Editor

Regarding the industrial commercialization of “Piezoelectric Actuators and Ultrasonic Motors”, we can point out at least the following million selling products in the past 15 years: Inkjet printer (piezoelectric) by Epson, Diesel injection valve (multilayer) by Siemens, Bosch, Denso (Peugeot, Toyota), Camera module for mobile phones (micro ultrasonic motor) by Samsung Electromechanics (Galaxy series), Piezoelectric energy harvesting device for Programable Air-Burst Munition by Micromechatronics Inc. (US Army). This Special Issue seeks contributions addressing:

- Novel actuator designs;
- Deeper modeling/simulation algorithms;
- Innovative piezo-actuator drive/control schemes; and
- Niche application areas of piezoelectric actuators

for the coming 10 year market expansion.

Guest Editor

Prof. Dr. Kenji Uchino

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

Deadline for manuscript submissions

closed (30 November 2021)



Actuators

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.3



mdpi.com/si/36366

Actuators
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)