

Special Issue

Dielectric Elastomer Actuators: Theory, Modeling and Application

Message from the Guest Editors

In recent years, with the development of materials science, smart materials have been widely used to make new-type actuators. Among these actuators, dielectric elastomer actuators (DEAs) have been paid more attention because of their human-muscle-like features, i.e., light, low stiffness, large deformation, enough power, and acceptable response time. They are also assumed to play a major role in soft robots, which have received tremendous interest for their potential applications. This Special Issue will provide an international forum for professionals, academics, and researchers to share their novel research results, including but not limited to theoretical studies, mathematical modelling, and control system design and application of DEA. It particularly welcomes emerging methodologies and techniques that bridge theoretical studies and applications of all mechatronic systems. This Special Issue aims to collect the latest research results and findings on DEA, to arouse more researchers' interest on DEA, and to expand its applications into more different fields.

Guest Editors

Dr. Changan Jiang

Department of Robotics, Osaka Institute of Technology, Osaka 535-8585, Japan

Dr. Yu Wei

Department of Mechanical Engineering, Hebei University of Technology, Tianjin 30000, China

Deadline for manuscript submissions

30 September 2025



Machines

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.7



mdpi.com/si/218409

Machines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
machines@mdpi.com

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





Machines

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 4.7



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



About the Journal

Message from the Editor-in-Chief

Machines is an international, peer reviewed journal on machinery and engineering. It publishes research articles, reviews and communications. Our aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. There is no restriction on the length of the papers. Full experimental and/or methodical details must be provided. There are, in addition, unique features of this journal: Manuscripts regarding research proposals and research ideas will be particularly welcomed; Electronic files or software regarding the full details of the calculation and experimental procedure - if unable to be published in a normal way can be deposited as supplementary material.

Editor-in-Chief

Prof. Dr. Antonio J. Marques Cardoso
CISE - Electromechatronic Systems Research Centre, University of
Beira Interior, Calçada Fonte do Lameiro, P-6201-001 Covilhã, Portugal

Author Benefits

High Visibility:

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

Journal Rank:

JCR - Q2 (Engineering, Mechanical) / CiteScore - Q1
(Control and Optimization)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.9 days after submission; acceptance to publication is undertaken in 2.4 days (median values for papers published in this journal in the first half of 2025).