

Special Issue

3D Printed Actuators

Message from the Guest Editors

It is quite remarkable to witness the achievements made in just the past decade in improving the efficiency, speed, shape factor, range of motion, and utility of 3D-printed actuators for applications in engineering, medicine, and robotics. The emergence of the 3D-printed actuators field and its achievements was enabled by advances in four key areas: active materials, additive manufacturing, reduced-order modeling, and design optimization. Recent research activities residing at the intersection of the aforementioned areas show great promise in creating a new class of transformable 3D actuators capable of changing their shape, dimension, speed, and adaptation to a myriad of internal and external stimuli. This Special Issue addresses the scientific and engineering challenges and reports recent advancements and discoveries in the field of 3D-printed actuators and collecting the manuscripts include but are not limited to the field: large range of motion, fabrication, miniaturization, distributive actuation and control, transformable and reconfigurable actuators, etc.

Guest Editors

Dr. Ed Habtour

William E. Boeing Department of Aeronautics & Astronautics, University of Washington, Box 352400, Seattle, WA 98195-2400, USA

Dr. Samuel Stanton

Aeronautics Department, United States Air Force Academy, Colorado Springs, CO 80840-5002, USA

Deadline for manuscript submissions

closed (31 March 2022)



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/67339

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

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





Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

You are invited to contribute research articles or comprehensive reviews for consideration and publication in *Micromachines* (ISSN 2072-666X). *Micromachines* is published in the open access format. Research articles, reviews and other contents are released on the internet immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. As an open access journal, *Micromachines* is supported by the authors or their institutes by payment of article processing charges (APC) for accepted papers. We are pleased to welcome you as our authors.

Editor-in-Chief

Prof. Dr. Nam-Trung Nguyen

Queensland Quantum and Advanced Technologies Research Institute,
Griffith University, West Creek Road, Nathan, QLD 4111, Australia

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, dblp, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Mechanical Engineering)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the second half of 2025).