

Special Issue

Wearable Piezoelectric Sensors for Biomedical Applications

Message from the Guest Editors

This Special Issue is titled and focuses on “Wearable Piezoelectric Sensors for Biomedical Applications”, highlighting cutting-edge advancements in self-powered, flexible, and highly sensitive sensing technologies. Piezoelectric sensors have revolutionized wearable healthcare by enabling real-time monitoring of physiological signals such as heart rate, respiration, muscle activity, and body motion. Their ability to convert mechanical energy into electrical signals makes them ideal for continuous health monitoring without the need for external power sources. This Special Issue explores recent developments in materials, fabrication techniques, signal processing, and system integration for wearable piezoelectric sensors. Topics include novel piezoelectric materials, flexible and biocompatible designs, energy-harvesting capabilities, and their applications in disease diagnosis, rehabilitation, and personalized medicine. By bringing together experts from academia and industry, this Special Issue aims to provide insights into current challenges, potential solutions, and future trends in wearable piezoelectric biomedical sensors.

Guest Editors

Dr. Ragu Sasikumar

School of Mechatronics Engineering, Korea University of Technology and Education, Cheonan, Republic of Korea

Dr. Palraj Ranganathan

Research and Development Center of Smart Textile Technology, Institute of Organic and Polymeric Materials, National Taipei University of Technology, No. 1, Sec. 3, Chung-Hsiao East Road, Taipei 10608, Taiwan

Deadline for manuscript submissions

31 December 2025



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/236507

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. Ai-Qun Liu

1. Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China
2. School of Electrical and Electronic Engineering, Nanyang Technological University, Singapore 639798, Singapore

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 17.2 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).