Special Issue

Advances in High-Performance Triboelectric Devices

Message from the Guest Editor

Dear Colleagues Since the introduction of triboelectric nanogenerators in 2012, people have opened up a new path in the field of energy harvesting. The energy harvesting object of triboelectric devices is low-frequency, high entropy, and distributed energy, which is also difficult to achieve in traditional electromagnetic power generation. Due to the abundant consumption of mechanical energy, triboelectric devices have many advantages, including the wide availability and selectivity of materials, relatively simple device configurations, and low-cost processing. In the field of mechanical energy harvesting, triboelectric devices usually have the characteristics of small size, high efficiency, and strong flexibility, which can provide sustainable energy for microelectronic devices and further achieve large-scale applications through array technology. Therefore, this Special Issue aims to present research papers, brief newsletters, and commentary articles, with a focus on the development of new methods for frictional electrical components and their applications in microelectronic devices.

Guest Editor

Dr. Qunfeng Zeng

School of Mechanical Engineering, Xi'an Jiaotong University, Xi'an 710049, China

Deadline for manuscript submissions

closed (31 December 2024)

Micromachines

an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed

mdpi.com/si/205400

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

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

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).

MDPI