

Special Issue

Sustainable Energy Harvesting: New Generation of Thermoelectric Materials and Devices

Message from the Guest Editor

Many emerging technologies, from wearable to healthcare devices, smart homes to smart cities, are progressing towards the use of cost-effective transistors and electronic circuits that can function with minimal energy use, providing solutions for future sustainable society. However, economic and environmental impacts due to large-scale battery use remain a major challenge. Under this context, thermoelectric materials (TE) are called to be a boon to the development of energy harvesting technologies from ambient sources that can help to overcome the aforementioned powering problems. Traditional research on thermoelectric materials is focused on improving the figure-of-merit zT to enhance the energy conversion efficiency. However, other factors such as environmentally friendliness, cost-effective materials, availability, recyclability, thermal stability, chemical and mechanical properties and ease of fabrication have become important for making it a viable technology.

Guest Editor

Dr. Mercè Pacios

Department of Advanced Materials for Energy Applications, Catalonia
Institute for Energy Research (IREC), C/Jardí de les Dones de Negre 1,
Planta 2, 08930 Barcelona, Spain

Deadline for manuscript submissions

closed (28 February 2022)



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/89140

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

Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China

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).