



## Self-Powered Devices and Systems

Guest Editor:

**Dr. Zhiyi Wu**

Beijing Institute of Nanoenergy  
and Nanosystems, Chinese  
Academy of Sciences, Beijing  
101400, China

Deadline for manuscript  
submissions:

**closed (15 March 2023)**

### Message from the Guest Editor

Dear Colleagues,

Sensor networks are essential for the development of the Internet of things and smart city. A general sensor, especially the mobile sensor, has to be driven by a power unit. Considering the high mobility, wide distribution, and wireless operation of the sensors, their sustainable operation remains a critical challenge owing to the limited lifetime of an energy storage unit. The concept of self-powered sensors and systems means to harvest the ambient energy for continuously driving a sensor without the use of an external power source, which aims to ensure the sensors can continuously work for a long time and without maintenance. So, self-powered sensors and systems are the inevitable trends for the future development of sensing technology. Accordingly, this Special Issue seeks to showcase research papers, and review articles that focus on novel developments in energy harvesting technology, active sensing technology, battery technology, and so on to promote self-powered sensors and systems into actual applications.





## Editor-in-Chief

## 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.

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

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

**Journal Rank:** JCR - Q2 (*Chemistry, Analytical*) / CiteScore - Q2 (*Mechanical Engineering*)

## Contact Us

---

Micromachines Editorial Office  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/micromachines](http://mdpi.com/journal/micromachines)  
[micromachines@mdpi.com](mailto:micromachines@mdpi.com)  
[X@micromach\\_mdpi](https://x.com/micromach_mdpi)