



Smart Devices and Systems for Vibration Sensing and Energy Harvesting

Guest Editors:

Prof. Dr. Kai Tao

School of Mechanical
Engineering, Northwestern
Polytechnical University, Xi'an
710072, China

Prof. Dr. Yunjia Li

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

Deadline for manuscript
submissions:

closed (28 February 2022)

Message from the Guest Editors

The Internet of things (IoT) poses new challenges for sensor devices and their power systems. The deployment of large numbers of sensor nodes requires the sensor to work for a sufficient period of time without battery replacement. Micro/nano energy harvesting systems as self-sustained power sources are capable of capturing and transforming unused ambient energy into electrical energy. They have been regarded as an alternative to conventional electrochemical batteries, which will pave the way for actualizing energy-autonomous devices and intelligent monitoring activities. By integrating the micro/nano power sources with IoT, it would be a revolutionary technology in the next decades. In addition, as most of the vibration energy harvester devices are sensitive to vibration, they are inherently considered excellent candidates for vibration sensing.

The purpose of this Special Issue is to gather the latest developments in smart devices and systems for vibration sensing and energy harvesting applications.





an Open Access Journal by MDPI

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

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 (*Physics, Applied*) / CiteScore - Q2 (*Mechanical Engineering*)

Contact Us

Micromachines Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/micromachines
micromachines@mdpi.com
[X@micromach_mdpi](https://twitter.com/micromach_mdpi)