

## Special Issue

# Extremely-Low-Power Devices and Their Applications

### Message from the Guest Editor

Over the past 60 years, the size reduction of electron devices has increased the density and speed of semiconductor chips exponentially. However, as the end of Moore's law approaches, power-consumption issues are becoming more critical in terms of energy efficiency, reliability, density and even performance. For example, it is expected that the ICT industry will use 20% of all electricity and emit up to 5.5% of the world's carbon emissions by 2025. Thus, extremely-low-power electronic systems are indispensable to the future of the ICT industry and various pioneering ideas have been proposed, including sharp-switching devices, M/NEMS devices, extremely-low-power memory/sensors, reconfigurable computing devices, neuromorphic devices and so forth. This Special Issue on extremely-low-power devices and their applications will cover the timely topics of pioneering semiconductors, M/NEMS and sensor devices for dramatic power saving and boosting energy efficiency.

---

### Guest Editor

Prof. Dr. Woo Young Choi  
Department of Electronic Engineering, Sogang University, Seoul, Korea

---

### Deadline for manuscript submissions

closed (30 April 2020)



## Micromachines

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 5.2  
Indexed in PubMed



[mdpi.com/si/18962](https://mdpi.com/si/18962)

*Micromachines*  
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 5.2  
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 (Physics, Applied) / CiteScore - Q2 (Mechanical Engineering)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.7 days after submission; acceptance to publication is undertaken in 2.5 days (median values for papers published in this journal in the first half of 2024).