

Special Issue

Magnetic and Spin Devices

Message from the Guest Editors

As scaling of electronic semiconductor devices displays signs of saturation, the main focus of research in microelectronics shifts towards finding new computing paradigms. The electron spin offers additional functionality to digital charge-based devices. Several fundamental problems including spin injection to a semiconductor, spin propagation and relaxation, as well as spin manipulation by the gate voltage have successfully been resolved to open a path towards spin-based reprogrammable electron switches. Devices employing the electron spin are non-volatile; they are able to preserve the stored information without external power. Emerging nonvolatile devices are electrically addressable, possess a simple structure, and offer endurance and speed superior to flash memory. This Special Issue focuses on all topics related to spintronic devices such as spin-based switches, magnetoresistive memories, energy harvesting devices, and sensors which can be employed in in-memory computing concepts and in the Artificial Intelligence of Things paradigm.

Guest Editors

Dr. Viktor Sverdlov

Institute for Microelectronics, Vienna University of Technology, 1040 Vienna, Austria

Dr. Nuttachai Jutong

Research Center for Quantum Technology, Faculty of Science, Chiang Mai University, Chiang Mai 50200, Thailand

Deadline for manuscript submissions

closed (1 September 2021)



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/59219

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

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).