

Special Issue

Electromagnetics with Graphene and 2D Materials: Physics, Applications and Meta-Devices

Message from the Guest Editors

This Special Issue seeks to conduct a holistic exploration of the physics, engineering principles, and technologies associated with disruptive 2D materials for advancing electromagnetic components, devices, and microsystems. These technologies cover both guided-wave and free-space light-matter interactions, extend across a wide frequency range (from microwaves and mmWaves to THz and optical), and employ graphene and/or emerging 2D materials, such as transition metal dichalcogenides, MXenes, black phosphorus, etc. Accordingly, this Special Issue will showcase research papers, communications, and review articles that focus on the analysis, the design, and proof-of-concept demonstrations of future micro/nano devices, metasurfaces, and system architectures that integrate established technologies with graphene and 2D materials.

Guest Editors

Dr. Alexandros Pitilakis

Dr. Odysseas Tsilipakos

Dr. Hamidreza Taghvaei

Deadline for manuscript submissions

30 November 2025



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/196325

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).