

Special Issue

Topological Photonic Microdevices for Next-Generation Sensing and Modulation

Message from the Guest Editors

Topological photonics is a rapidly evolving field that uses geometrical and topological concepts to design photonic structures for controlling light. Inspired by the discovery of the quantum Hall effects and topological insulators in condensed matter, research has demonstrated novel topological phenomena, particularly robust unidirectional broadband light propagation, through fabricated photonic devices with high performance and immunity to fabrication errors and defects. This shows great promise for various applications. The flexibility and diversity of topological photonics systems enable new opportunities to realize exotic topological models and explore topological effects in innovative ways. This Special Issue invites contributions (research papers, communications, and reviews) on experimental and theoretical advances in topological photonics, covering platforms like photonic crystals, waveguides, metamaterials, cavities, optomechanics, silicon photonics, and circuit QED, with applications spanning on-chip communication, optical switches, lasers, sensors, terahertz devices, quantum systems, and beam splitters.

Guest Editors

Prof. Dr. Hongming Fei

College of Physics and Optoelectronics, Taiyuan University of Technology, Taiyuan, China

Prof. Dr. Jianping Chen

The State Key Laboratory on Fiber Optic Local Area Communication Networks and Advanced Optical Communication Systems, Shanghai Jiao Tong University, Shanghai 200240, China

Deadline for manuscript submissions

31 January 2026



Micromachines

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



mdpi.com/si/241616

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).