Special Issue

Integration of MEMS, 3D Printing, and Nano-Enabled Technologies in Wireless Communication and Sensing Systems

Message from the Guest Editors

This Special Issue highlights the latest research and developments in reconfigurable wireless communication and sensing systems, with a focus on interdisciplinary approaches that combine MEMS, 3D printing, and nanotechnology. Topics include but are not limited to the following:

- Design and fabrication of reconfigurable antennas and sensors using MEMS and 3D printing;
- Nano-enabled materials for enhanced signal processing, energy harvesting, and sensing capabilities;
- Applications in IoT, 5G/6G networks, healthcare, environmental monitoring, and smart infrastructure;
- Challenges and opportunities in the scaling, integration, and commercialization of these technologies.

By bringing together contributions from leading researchers and industry experts, this Special Issue will provide a comprehensive overview of the state of the art and inspire future innovations in reconfigurable wireless communication and sensing systems. We invite original research articles, reviews, and case studies that demonstrate the transformative impact of MEMS, 3D printing, and nano-enabled technologies in this dynamic field.

Guest Editors

Dr. Ignacio Llamas-Garro

Centre Tecnològic de Telecomunicacions de Catalunya, CTTC/CERCA, 08860 Castelldefels, Spain

Dr. Satvendra Kumar Mishra

Centre Tecnològic de Telecomunicacions de Catalunya, CTTC/CERCA, 08860 Castelldefels, Spain

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/231146

Micromachines
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
micromachines@mdpi.com

mdpi.com/journal/micromachines





an Open Access Journal by MDPI

Impact Factor 3.0
CiteScore 6.0
Indexed in PubMed



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

Department of Electrical and Electronic Engineering, The Hong Kong Polytechnic University, Hong Kong, China

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).

