

## Special Issue

# Exploring the Potential of 5G and Millimeter-Wave Array Antennas

### Message from the Guest Editors

Satellite communication systems (SatComS) are evolving with the introduction of satellite internet applications, leveraging mmWave, multi-polarization, and steerable antennas. Satellite Internet connectivity provides enabling technology for the 5th generation of communication (5G) by providing the means to extend broadband connectivity to rural and underserved areas. One of the key components of satellite internet is the mmWave antenna that can provide wide-angle scanning. This Special Issue aims to focus on the latest designs and development of mmWave antennas for satellite internet for micromachines. Topics of interest:

- Electronically steerable antennas
- Mechanically steerable antennas
- Ku, Ka, Q, V, and W band antennas
- Multibeam antennas
- mmWave active phased array antennas
- Multireflector antennas
- Reflectarray steerable antennas
- mmWave antenna beamforming
- Filtering antennas
- Over-the-air (OTA) antenna measurement
- Reconfigurable phased array antennas
- Multipolarization phased array antennas
- Antennas for LEO, GEO, and HAPS connectivity
- Metasurface steerable antennas

---

### Guest Editors

Dr. Sima Noghianian

CommScope Ruckus Networks, 350 W Java Dr, Sunnyvale, CA 94089, USA

Dr. Reena Dahle

Division of Engineering Programs, State University of New Paltz (SUNY), New Paltz, NY 12561, USA

---

### Deadline for manuscript submissions

closed (10 March 2023)



## Micromachines

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.0  
CiteScore 6.0  
Indexed in PubMed



[mdpi.com/si/87177](https://mdpi.com/si/87177)

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

---

### 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 16.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the second half of 2025).