Special Issue

Advanced Massive MIMO Antenna Arrays, Metasurfaces and Reconfigurable Intelligent Surfaces for Sensing, Localization, and Wireless Communications: 2nd Edition

Message from the Guest Editors

With the complex electromagnetic environment and increasing demand on communication capacity, some different technologies have been proposed and studied to fulfill the severe requirements. Among them, the massive MIMO antenna array is a promising technology to increase the channel capacity by leveraging multiple antenna elements to receive and transmit electromagnetic waves. On the other hand, massive MIMO antenna arrays can further adapt to the time-varying environment at millimeter-wave bands via beamforming. Recently, metasurfaces and reconfigurable intelligent surfaces have been extensively studied as promising and exciting technologies for the evolved 5G and upcoming 6G wireless communications. They can manipulate the performance of the electromagnetic waves impinging on them, converting the unfavorable electromagnetic environment to a favorable one for high-quality and high-efficiency sensing, location, and wireless communications. This Special Issue is being launched with the aim of collecting recent research on advanced massive MIMO antenna arrays, metasurfaces, and reconfigurable intelligent surfaces for sensing, location, and wireless communications.

Guest Editors

Dr. Peng Mei

Prof. Dr. Shuai Zhang

Dr. Liying Nie

Deadline for manuscript submissions

20 October 2025

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/si/223787

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

mdpi.com/journal/sensors

Sensors

an Open Access Journal by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

mdpi.com/journal/sensors

MDPI

About the Journal

Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro
Dipartimento di Ingegneria Elettrica e dell'Informazione (Department of Electrical and Information Engineering), Politecnico di Bari, Via Edoardo Orabona n. 4, 70125 Bari, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Ei Compendex, Inspec, Astrophysics Data System, and other databases.

Journal Rank:

JCR - Q2 (Instruments and Instrumentation) / CiteScore - Q1 (Instrumentation)