

Special Issue

Channel Characterization and Modeling for Future Wireless Communication Systems

Message from the Guest Editors

Channel characterization and modeling are essential for developing efficient, reliable wireless systems, as they directly influence performance metrics like data rates, latency, and coverage. This Special Issue invites contributions on fundamental theories and key technologies, including channel measurement, standardization, and modeling for 6G and Wi-Fi systems. Potential topics include, but are not limited to, the following:

Channel characterization and modeling for satellite-terrestrial integrated networks.

Air-ground channel measurement and modeling.

Channel measurement and modeling for new technologies, e.g., XL-MIMO, ISAC, and RIS.

Channel measurement and modeling in complex scenarios, e.g., IIoT, V2X, and marine communications.

Channel measurement and modeling for new bands of 6G and Wi-Fi.

Machine learning-based channel modeling in dynamic environments.

Key technologies of channel digital twin.

Standardization of channel models for future wireless systems.

Guest Editors

Dr. Pan Tang

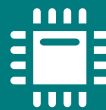
State Key Laboratory of Information Photonics and Optical Communications, Beijing University of Posts and Telecommunications, Beijing 100876, China

Dr. Kun Yang

Department of Information Engineering, Zhejiang Ocean University, Zhoushan 316022, China

Deadline for manuscript submissions

31 January 2027



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/261251

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

[mdpi.com/journal/
sensors](https://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](https://mdpi.com/journal/sensors)



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
Department of Electrical and Information Engineering, Politecnico di Bari, Via Orabona 4, 70126 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)