

Special Issue

Semantic Communication for the Internet of Things

Message from the Guest Editor

For this Special Issue of *Sensors*, we welcome high-quality original research and comprehensive surveys that advance theory, algorithms, and implementations of semantic communication for IoT applications. Topics of interest include, but are not limited to, semantic source and channel coding, ontology-driven sensing, cross-layer semantic metrics, intent-based networking, joint perception–communication design, semantic distortion and reliability analysis, distributed representation learning at the edge, task-oriented federated learning, semantic middleware for heterogeneous sensors, security and privacy of semantic exchange, standardization efforts, and real-world testbeds or datasets. Submissions should articulate clear novelty, methodological rigor, and practical relevance, highlighting how semantic principles enhance efficiency, reliability, or interpretability in IoT systems. The Special Issue aims to bring together researchers from communications, signal processing, artificial intelligence, and domain-specific IoT fields to shape the next generation of meaning-centric networks.

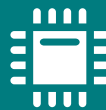
Guest Editor

Dr. Samer Lahoud

Faculty of Computer Science, Dalhousie University, Halifax, NS B3H 4R2, Canada

Deadline for manuscript submissions

15 April 2026



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed

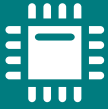


mdpi.com/si/246190

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

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)