

Special Issue

Next Generation Multimodal Semantic Communication Networks

Message from the Guest Editors

With the rapid development of deep learning, mobile edge computing, deep reinforcement learning, semantic communication, and other fields, traditional communication techniques have not been able to meet the requirements of large bandwidth and low delay in the next generation networks. Meanwhile, the semantic communication framework has shown its potential advantages in many fields, such as video conferencing and remote sensing, etc. Therefore, new algorithms, including multimodal data semantic understanding and processing, joint source-channel coding, etc., should be explored. The topics of interest include, but not limited to:

- Cross-modal semantic analysis;
- Context awareness algorithms based on multimodal data;
- Task-oriented multimodal data transmission;
- Multitask semantic communications;
- Multimodal data fusion;
- Joint source-channel coding;
- Multimodal remote sensing data processing;
- AI-driven semantic communication networks.

Guest Editors

Dr. Jie Guo

Prof. Dr. Bin Song

Dr. Ru Huo

Dr. Dapeng Lan

Deadline for manuscript submissions

closed (31 March 2023)



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/135980

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

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





Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



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



About the Journal

Message from the Editor-in-Chief

Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

Prof. Dr. Flavio Canavero

Department of Electronics and Telecommunications, Politecnico di
Torino, 10129 Torino, Italy

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), CAPlus /
SciFinder, Inspec, Ei Compendex and other databases.

Journal Rank:

JCR - Q2 (Engineering, Electrical and Electronic) /
CiteScore - Q1 (Electrical and Electronic 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 2.4
days (median values for papers published in this journal in
the first half of 2025).