Special Issue

Evolution of Physical-Layer-Security-Enhanced Wireless Communications Towards 6G

Message from the Guest Editors

The advent of 6G wireless communication networks promises to revolutionize the way we interact in the digital world, as well as the real world. This Special Issue aims to explore the evolution of physical-layer-security-enhanced wireless communications in the context of 6G. Topics of interest include (but are not limited to) the following:

- Innovative physical-layer security protocols and mechanisms tailored for 6G;
- Secure waveform design and modulation techniques for 6G;
- Physical-layer authentication and key management in 6G networks;
- Quantum-inspired approaches to physical-layer security for 6G;
- Machine learning and AI-driven solutions for enhancing physical-layer security in 6G;
- Cross-layer design methodologies for integrating physical-layer security in 6G systems;
- Experimental studies and testbed implementations of physical-layer security in 6G environments;
- Performance analysis and evaluation of physical-layer security solutions for 6G;
- Integration of physical-layer security with emerging 6G technologies (e.g., terahertz communications, massive MIMO, etc.);
- Privacy-preserving techniques and anonymity in 6G wireless communications.

Guest Editors

Prof. Dr. QingHe Du
School of Information and Communications Engineering, Xi'an Jiaotong University, Xi'an 710049, China

Dr. Xiao Tang
School of Information and Communication Engineering, Xi'an Jiaotong University, Xi'an 710049, China

Deadline for manuscript submissions

closed (15 October 2025)

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/si/211157

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

mdpi.com/journal/electronics

Electronics

an Open Access Journal by MDPI

Impact Factor 2.6
CiteScore 6.1

mdpi.com/journal/electronics

MDPI

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 guestedited 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 16.4 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).