

Special Issue

5G and 6G Networks: Advances in Self-Organizing, Cybersecurity and Privacy

Message from the Guest Editors

This Special Issue invites contributions that address these multifaceted challenges, offering insights into strategies for ensuring network resilience, protecting data privacy, and optimizing network performance while considering ethical and regulatory standards. **Topics:**

This Special Issue is dedicated to a diverse array of research topics related to 5G and 6G, including, but not limited to, the following:

- Advances in AI-driven automation for self-organizing networks in 5G and 6G
- Machine learning algorithms for dynamic network optimization
- Energy-efficient self-organizing network architectures
- Self-healing mechanisms for fault tolerance in next-generation networks
- Adaptive resource allocation and traffic management in SONS
- Zero Trust security models for 5G/6G technologies
- Securing edge computing and network slicing in 5G/6G environments
- Post-quantum cryptography for next-generation wireless networks
- Cybersecurity challenges in massive IoT deployments over 5G and 6G
- Privacy-enhancing technologies (PETs) in 5G/6G communications
- Secure and privacy-preserving AI models for network intelligence
- Blockchain applications for secure and decentralized mobile networks

Guest Editors

Dr. Pedro Pinto

GECAD, Instituto Superior de Engenharia do Porto, 4200-072 Porto, Portugal

Dr. Silvestre Malta

Audit-Laboratory, Instituto Politécnico de Viana do Castelo, Viana do Castelo, Portugal

Deadline for manuscript submissions

25 September 2025



Sensors

an Open Access Journal
by MDPI

Impact Factor 3.5
CiteScore 8.2
Indexed in PubMed



mdpi.com/si/234827

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)