Special Issue

Advances in Wireless Communication Technologies for IoT Devices

Message from the Guest Editors

The IoT is expanding rapidly, with tens of billions of connected devices projected to shape smart cities, industries, homes, and the environment. This growth demands wireless technologies that are low-power, wide-ranging, high-capacity, low-cost, and reliable. No single technology can meet all these needs, leading to a dynamic ecosystem of complementary innovations.

This Special Issue seeks cutting-edge research and review articles on the latest advancements, challenges, and future trajectories in wireless technologies for IoT. We aim to explore solutions from long-range cellular and satellite networks to ultra-low-power backscatter communication, and address integration challenges in complex environments. The goal is to foster discussion on how these technologies can coexist and create a seamless, sustainable connected world.

We welcome submissions on the following IoT themes:

- 5G-advanced/future 6G
- Next-generation LPWAN
- Non-terrestrial networks
- Ambient backscatter and battery-free systems
- AI/ML-driven wireless resource management
- Advanced short-range networking
- Joint communication and sensing
- Security and privacy for constrained devices
- Network slicing and edge intelligence

Guest Editors

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Deadline for manuscript submissions

30 May 2026



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About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

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Author Benefits

High Visibility:

indexed within ESCI (Web of Science), Scopus, EBSCO, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 25.7 days after submission; acceptance to publication is undertaken in 3.9 days (median values for papers published in this journal in the first half of 2025).

Journal Rank:

JCR - Q2 (Telecommunications) / CiteScore - Q1 (Computer Science (miscellaneous))

