

Special Issue

5G and Beyond Mobile Networks for the Metaverse: Challenges and Opportunities

Message from the Guest Editors

The evolution of 5G networks and emerging mobile computing technologies has unlocked new possibilities for the Metaverse, enabling immersive, interactive, and large-scale virtual environments. As the Metaverse continues to expand, network performance, scalability, and intelligence become critical factors in delivering seamless and high-quality experiences to millions of concurrent users. To meet these demands, advanced Mobile Edge Computing (MEC), fog computing, and AI-driven networking are being integrated into 5G infrastructures to reduce latency, enhance processing efficiency, and optimize real-time data transmission. These technologies empower intelligent resource management, real-time analytics, and adaptive connectivity, ensuring that Metaverse applications. This Special Issue seeks original research articles and review papers that explore innovative network architectures, AI-enhanced mobile systems, and next-generation computing paradigms that leverage 5G for Metaverse applications. We encourage interdisciplinary contributions that focus on the intersection of mobile networks, edge/fog computing, AI, and immersive technologies to advance Metaverse connectivity.

Guest Editors

Dr. Jinsul Kim
Prof. Dr. Tai-Won Um
Prof. Dr. Gyu Myoung Lee

Deadline for manuscript submissions

closed (15 September 2025)



Electronics

an Open Access Journal
by MDPI

Impact Factor 2.6
CiteScore 6.1



mdpi.com/si/233409

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 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).