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 Aldriven 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, Al-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

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Deadline for manuscript submissions

closed (15 September 2025)



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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

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