



Wireless and Mobile Communication Networks: Latest Advances and Prospects

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Deadline for manuscript
submissions:
closed (31 January 2024)

Message from the Guest Editors

With the great commercial success of 5G networks, the focus of the research community is on future wireless and mobile communication networks. Software-defined networks have proven their high efficiency in core network implementations; however, their reliance on physical layers hinders the application of artificial intelligence and machine learning. Higher frequency bands are essential in coping with high traffic-volume demands; new antenna technologies such as fluid antenna or phased-array antenna and related beamforming algorithms are still not yet capable of supporting such frequencies. We are also witnessing the growth of emerging unmanned aerial vehicles (UAVs) and low-earth orbit (LEO) satellite constellations, which create novel challenges in 3D network design and resource allocation. Furthermore, ensuring the end-to-end security with high energy efficiency in the heterogeneous mobile networks calls for deeper exploration.

This Special Issue aims to collect high-quality research papers and review articles on the latest advances and prospects in wireless and mobile communication networks, including 5G and B5G, and miniaturization platform integration.





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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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