

Special Issue

mmWave Channel Measurements in Drone Communications and Networks

Message from the Guest Editors

The Special Issue addresses the measurement and description of dynamic channels at mm-wave frequencies for drones, from both a theoretical perspective and in practical measurements.

We welcome contributions that provide comparisons between mmWave communication, free-space optics (FSO), optical wireless communication, and terahertz (THz) links, particularly in the context of drone applications. These comparisons may explore the advantages, limitations, and trade-offs of each technology in terms of range, bandwidth, robustness to environmental factors, power consumption, and ease of deployment for aerial platforms. The scope of this Special Issue includes, but is not limited to, the following topics:

- The design and optimization of beamforming for dynamic drone networks;
- Channel modelling for drones;
- Channel measurement techniques;
- Experimental validation with measurement data;
- Physical layer security using drones;
- Cooperative communication using drones with terrestrial and satellite networks.

Guest Editors

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closed (15 July 2025)



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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 guest-edited by leading experts in selected topics of interest.

Editor-in-Chief

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