

Special Issue

UAV Communications in the 6G Era: From Near-Field Theory to Intelligent Networking

Message from the Guest Editors

In recent years, unmanned aerial vehicle (UAV) communications have experienced rapid development and widespread adoption across diverse application scenarios, owing to their unparalleled advantages in on-demand deployment and operational flexibility.

Nevertheless, with the advent of 6G networks, this burgeoning field faces numerous technical challenges and fundamental limitations that warrant in-depth investigation. We welcome contributions addressing all theoretical and practical aspects of UAV communications and networks. Topics of interest include, but are not limited to, the following:

- Near-field theories and implementations for UAV networks;
- Emerging antenna technologies for UAV communications;
- Trajectory optimization approaches;
- Advanced multiple access techniques;
- AI enhanced UAV communications;
- Spectrum and energy efficiency;
- Wireless resource management methods;
- Channel knowledge map for navigation;
- Air-ground channel modelling for complex environment;
- Cooperative control of UAV swarms;
- Next-generation wireless technologies for UAV networks;

Guest Editors

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Message from the Editor-in-Chief

I would like to introduce the new, online, and open access journal *Telecom*. The purpose of *Telecom* is to publish high-quality research papers as well as review articles that address recent advances in communications technology. We invite researchers to contribute original papers describing applications and experiences in emerging trends of all fields of telecommunications engineering. *Telecom* also welcomes Special Issue proposals from academics and industrial researchers. We aim to facilitate more collaboration between scientists and engineers around the world, such that they will produce their innovative ideas and submit their cutting-edge technologies to *Telecom*. We anticipate the receipt of your contributions to *Telecom*, and we welcome your comments and ideas on how to improve this journal.

Editor-in-Chief

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