

Special Issue

Quantum Communication, Quantum Networks, and Quantum Communication Devices

Message from the Guest Editor

Quantum communication and quantum networks are at the forefront of next-generation secure communication technologies. Leveraging the principles of quantum mechanics, these systems offer unparalleled advantages in security over classical counterparts. This Special Issue aims to bring together cutting-edge research on quantum communication protocols, quantum network architectures, and quantum communication devices. We invite original research articles and comprehensive reviews that address theoretical advancements, experimental progress, and engineering challenges in this rapidly evolving field.

- Quantum key distribution (QKD)
- Quantum network architectures and protocols
- Quantum repeaters and entanglement distribution
- Satellite-based and free-space quantum communication
- Quantum teleportation and long-distance quantum communication
- Integrated photonic and solid-state quantum communication devices
- Quantum error correction for communication networks
- Hybrid classical-quantum communication networks
- Practical implementation and standardization of quantum communication systems
- Machine learning and AI for quantum communication networks

Guest Editor

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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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