



# Special Issue

Announcing a Feature Section of the *IEEE Photonics Journal* dedicated to:  
**Quantum Communication Technologies**

**Submission Deadline: Nov. 30, 2024**

The IEEE Photonics Journal will publish a Feature Section dedicated to *Quantum Communication Technologies*. By employing quantum entanglement and superposition, these technologies enable secure communication channels that are virtually immune to eavesdropping. Quantum key distribution is a prominent application, allowing two parties to share encryption keys with guaranteed security. Additionally, quantum repeaters and satellites are being developed to extend the range of quantum networks. These advancements promise to revolutionize secure communications, providing unprecedented levels of privacy and data integrity in fields such as finance, defense, and personal privacy. This Special Issue aims to provide a platform for researchers to present most recent discoveries and developments in the related areas, which include but not limited to the following topics:

*Quantum cryptography, quantum key distribution, teleportation, entanglement distribution, photonic cluster states, quantum memory, frequency conversion of quantum light, quantum light sources and detectors, multi-photon interference experiments, integrated quantum optics and theory and protocols for quantum communication.*

Both fundamental research and application-related contributions are encouraged.

The submission starts on **August 15, 2024** and the deadline for submission of manuscripts is **November 30, 2024**. Publication is scheduled for the January 2025 issue. Submissions should be made online at <https://ieeeyonrex.com/journal/pj-ieee> with papers formatted compliant to IEEE Photonics Journal standards. All submissions will be reviewed in accordance with the normal procedures of the Journal. Be sure to tag the paper type as Quantum Communication Technologies, not an Original Paper and Technical topic as #6 (Focus Issue).

Authors may contact anyone below for more information or at the website at <https://www.photonicsociety.org/publications/photonics-journal/call-for-papers>.

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