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Photonics Technologies for Smart Quantum Networks

Guest Editor:

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Message from the Guest Editor

Dear Colleagues,

This Special Issue of Photonics, entitled "Photonics Technologies for Smart Quantum Networks", welcomes articles addressing, among others, the deployment of a practical quantum toolbox enabling (sub)systems and quantum-enhanced secured networks and infrastructures. We expect to cover a variety of topics, including the following:

- Novel optical systems for QKD and QIP building blocks;
- Photonic integration in support of quantum technological blocks;
- QKD-enabled infrastructure including fiber/terrestrial FSO/satellite quantum links;
- Quantum secured infrastructure for networks;
- QKD and PQC integration and interfaces;
- Quantum networks and applications beyond QKD;
- DV-/CV-QKD and quantum safe security for future optical/wireless networks;
- Advanced features (SDN/NFV/AI/ML) for smart multinode connectivity;
- Entanglement distribution deployments and networks;
- Sources of entanglement for practical quantum node.



