Special Issue

Integrated Quantum Photonic Chips

Message from the Guest Editor

This Special Issue explores innovative advancements in areas such as

- Integrated Quantum Light Sources: the development of on-chip sources of single photons, entangled pairs, and squeezed states to enable compact and efficient quantum devices.
- Quantum State Control and Manipulation: techniques for the precise and scalable control of quantum states using integrated waveguides, resonators, and non-linear optical components.
- High-Performance Quantum Detectors: on-chip integration of low-noise, high-efficiency photon detectors for advanced quantum measurements.
- Scalable Fabrication Methods: innovations in scalable fabrication techniques such as atomic layer deposition, hybrid integration, and lithography for producing high-performance quantum photonic devices.
- Applications and Implementations: use cases for integrated photonic chips in quantum communication, quantum key distribution, quantum computing, and quantum sensing.

Guest Editor

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Editor-in-Chief

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