

Special Issue

Advances in Photonic Quantum Information Processing: From Theory to Experiments

Message from the Guest Editor

The photonic quantum information processing technique has an important role in the intersection of quantum physics and classical optics. In recent years, significant advancements have been made in the field of photonic quantum information processing. This Special Issue is focused on recent advancements in a series of related domains. Photonics, the science and technology of generating, manipulating, and detecting light, has a pivotal role in the advancement of quantum information science. The unique properties of photons, such as their low interaction with the environment and high-speed transmission capabilities, make them ideal carriers of quantum information. This Special Issue brings together a collection of peer-reviewed articles that spans the theoretical foundations and experimental breakthroughs in photonic quantum information processing. Contributions that delve into the interdisciplinary aspects of quantum optics and related technological applications are encouraged. This Special Issue welcomes fundamental theory research, advanced technologies, and innovative applications.

Guest Editor

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Message from the Editor-in-Chief

You are invited to contribute a research article or a comprehensive review for consideration and publication in *Photonics* (ISSN 2304-6732). *Photonics* is an online open access journal covering both the fundamental and applications of optics and photonics. *Photonics* strives to provide an avenue to allow authors to disseminate their scientific findings—both theoretical/ simulations and experimental works—in highly accessible peer-reviewed journal publications. The manuscript in *Photonics* will be handled with quick turnaround production processing time. We welcome authors to submit their manuscripts for publications in *Photonics*. Our goal in *Photonics* is to enable fast dissemination of high impact works to the scientific community.

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