

Special Issue

Optical Quantum Manipulation of Rydberg Atoms

Message from the Guest Editors

This Special Issue aims present original cutting-edge research articles predicting, understanding, and exploiting new nonlinear and nonclassical features of highly excited Rydberg atoms in various subfields of physics. Researchers are invited to submit their contributions to this Special Issue. It covers a wide range of topics related to the optical quantum manipulation of Rydberg atoms, including but not limited to:

- Quantum entanglement with Rydberg atoms;
- Quantum logic gates with Rydberg atoms;
- Quantum simulation with Rydberg atoms;
- Quantum optics with Rydberg atoms;
- Quantum many-body physics in Rydberg atoms;
- Quantum hybrid system with Rydberg atoms;
- High-precision metrology with Rydberg atoms;
- Novel nonlinear effects in Rydberg atoms;
- Novel nonlocal effects in Rydberg atoms;
- Novel optical devices with Rydberg atom;
- Non-Hermitian optics with Rydberg atoms.

Guest Editors

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About the Journal

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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