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Optical Quantum System

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Message from the Guest Editors

Optical quantum systems have attracted considerable attention and become one of the most active research areas in quantum science and technology. Novel advances in optoelectronic materials, integrated technologies, precision measurement, and information science boost the rapid development of optical quantum system. The exciting applications and rich emerging technologies based on optical quantum systems will shape the new area of quantum optics in the future.

This Special Issue aims to present reviews and cutting-edge research articles on the latest advances and potential applications of “Optical Quantum Systems” and related research fields, including but not limited to:

- Quantum precision measurement and sensing;
- Quantum imaging and interference measurement;
- Production and manipulation of ultracold atoms and molecules;
- Precise spectroscopy measurement of atoms and molecules;
- Optical quantum cryptography and integrated quantum devices;
- Quantum simulation and computation with cold particle array;
- Single-atomic and molecular optical and nanophotonic systems;
- Quantum information processing and quantum communication.