Special Issue

Advances in Laser Manipulation of Neutral Atoms

Message from the Guest Editors

Nowadays, rapid developments in the field of AMO (atomic, molecular, and optical) physics have revolutionized research in many areas, including fundamental physics, precision spectroscopy and measurement, quantum metrology, astronomy and astrophysics, geodesy and hydrology, quantum simulation, and information and computation. This Special Issue focuses on the laser manipulation of neutral atoms, aiming to collect the latest progress in fundamental research and related applications in this area. You are invited to submit your original research papers and review papers to this Special Issue. Technical topics include but are not limited to the following:

- Laser cooling and trapping;
- Quantum gases;
- Laser-based precision spectroscopy;
- Optical tweezers;
- Atoms in an optical cavity;
- Atoms in an optical lattice;
- Atomic frequency standards and clocks;
- Atomic magnetometer and gyroscope;
- Atomic interferometer;
- Quantum simulation and computation with atoms;
- Spin squeezing and quantum entanglement with atoms;
- Search for the new physics of atoms.

Guest Editors

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Deadline for manuscript submissions

closed (28 February 2023)

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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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