Special Issue

Levitated Optomechanics

Message from the Guest Editors

Levitated optomechanics, focusing on mesoscopic systems that are extremely well isolated from the thermal environment, is considered as the most promising candidate for macroscopic quantum physics research and a unique tool for supporting next-generation sensing technologies. This Special Issue invites manuscripts that introduce the recent advances in “Levitated Optomechanics”. All theoretical, numerical, and experimental papers are accepted. Topics include, but are not limited to, the following:

- Feedback cooling of levitated micro- or nano-particles;
- Clean and precise launching strategy;
- Real-time trapped particle characterization;
- Novel displacement calibration method;
- Miniature setup of optomechanics sensors;
- Progress in cavity optomechanics;
- Force/acceleration/torque sensing based on levitated optomechanics
- Thermal effect of trapped particles in a vacuum;
- Levitating particles with non-Gaussian beams in a vacuum.

Guest Editors

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Deadline for manuscript submissions

closed (20 December 2024)

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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.

Editor-in-Chief

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