



Levitated Optomechanics

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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.

