

# Special Issue

## Optical Tweezers as Scientific Tools: Applications and Techniques

### Message from the Guest Editor

With this Special Issue, we are aiming to reduce the gap between optical tweezer developers and users. The potential topics of this Special Issue include, but are not limited to, the following:

- Any application where particles are trapped or manipulated;
- Applications in biology and medicine;
- Applications in biophysics;
- Applications in ultra-cold atom physics;
- Applications in quantum optics and optomechanics;
- Engineering and industrial uses;
- Measurement techniques that involve or benefit from optical tweezers, including experimental improvements of previous realizations;
- Active and passive approaches to generate optical tweezers;
- Methods to statically or dynamically control their position, shape, intensity, trajectory, polarization, etc.;
- Methods to multiplex the number of beams;
- Open and closed loop approaches to control the beam point spread function;
- Laser beam modes that differ from the Gaussian modes, including their realization and application.

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### Guest Editor

Dr. Vladislav Gavryusev

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### Deadline for manuscript submissions

closed (31 December 2023)



## Photonics

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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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### Editor-in-Chief

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