

Special Issue

New Insights in Optical Manipulation Techniques: From Fundamental Advances to Biomedical Applications

Message from the Guest Editor

The field of optical manipulation has undergone transformative developments since the pioneering work of Prof. Arthur Askin, evolving into a cornerstone technology for precision control of micro- and nano-scale objects. Recent innovations in photonic tools, such as optical fiber tweezers and scanning optical tweezers, have expanded the horizons of optical manipulation, enabling unprecedented capabilities in biophysics, medical engineering, and materials science. This issue will focus on novel methodologies, theoretical breakthroughs, and interdisciplinary applications of optical manipulation technologies. Topics of interest include, but are not limited to:

- **Fundamental studies**
- **Advanced optical trapping systems**
- **In vivo and intravital optical manipulation**
- **Hybrid optofluidic and optomechanical platforms**
- **Nanophotonic manipulation**
- **AI-driven optical manipulation**
- **Biomedical applications**

We look forward to your groundbreaking contributions to this exciting frontier of photonics!

Guest Editor

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Deadline for manuscript submissions

30 November 2025



Photonics

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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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