

Special Issue

Light Focusing and Optical Vortices

Message from the Guest Editor

Solving a problem that is as fundamental as controlling the state of light is one of the most important areas of study in modern optics and nanophotonics. To achieve this goal, it is essential to understand the physical effects that arise during the propagation of laser beams, including during their focusing, as well as the possibility of predicting these effects. This is possible by developing a theory which describes the characteristics of laser light. Singular optics, which studies vortex optical beams, can be called upon to answer these questions. This Special Issue aims to present state-of-the-art articles regarding both theoretical and experimental studies on the generation, propagation, focusing and measurement of light beams and applications of structured beams. Topics include, but are not limited to:

- The design, simulation, and manufacturing of optical devices for light focusing (metasurfaces, zone plates, plasmonic lenses, etc.);
- Properties of tightly focused light;
- Photonic nanojet;
- Light bullet;
- Overcoming the diffraction limit;
- Applications of tightly focused light;
- Singular optics;
- The generation of optical vortices;

Guest Editor

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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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