Special Issue

Vortex Beams: Transmission, Scattering and Application

Message from the Guest Editors

Vortex beams have recently received significant attention because of their spiral phase distribution with orbital angular momentum (OAM). They have been widely used in light scattering, optical tweezers, optical wireless communication, and advanced optics filed regulation. Therefore, research on the propagation of vortex beams in atmospheric turbulence and OAM mode detection will contribute to OAM optical communication. We believe that advances in these research fields will push this technology forward. This Special Issue will cover a range of topics from the field including, but not limited to, the following:

- Vortex beam scattering;
- Propagation of optical beams in atmospheric turbulence;
- Vortex beam transmission in multilayered medium;
- Regulation of vortex beam fields;
- Optical manipulation by vortex beams;
- Atmospheric optics;
- Orbital angular momentum state recognition;
- Optics communications;
- Terahertz vortex beams, networks, and systems;
- Vortex beams and OAM modes;
- Applications of vortex beam scattering and propagation.

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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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