Special Issue

Optical Instrumentation

Message from the Guest Editors

This Issue is dedicated to recent advances in the field of basic optical instruments, functional devices, and the wide-ranging applications of optical instruments. Topics of interest include, but are not limited to, the following areas:

- Optical components and design methodology;
- New developments in light source modeling;
- Design tools for optical technologies;
- Electro-optical instruments and methods;
- Optical techniques in metrology;
- Optical characterization methods;
- Optical interferometric techniques;
- Imaging systems;
- Holography-based optical instrumentation;
- Digital holographic microscopy;
- Medical imaging techniques;
- Single-pixel imaging;
- Lensless computational imaging;
- Fourier ptychographic microscopy;
- Tomography;
- Optical coherence tomography;
- Particle image velocimetry;
- Cytometry applications;
- Biomedical applications based on optical techniques;
- Application of artificial intelligence algorithms in optical devices;
- Deep-learning-based optical instrumentation;
- Data processing and exploitation in optical instrumentation;
- Lab-on-a-chip or on-chip photonics sensors/imagers;
- Photoacoustic imaging;
- Phase retrieval (and generally inverse problems).

Guest Editors

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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 peerreviewed 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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