Special Issue

Focus on Nonlinear Processing and Detection Technologies of Weak Optical Signal

Message from the Guest Editors

Accurate detection of weak optical signals with a very low signal-to-noise ratio is very important in areas including optical communication, imaging, remote sensing, and quantum optics. Some nonlinear processing techniques have unique advantages for weak optical signal detection, which can amplify and regenerate the weak signal from different noises such as phase noise, amplitude noise, or quantum noise. In order to focus on the latest research progress in nonlinear processing and detection technologies of weak optical signals, we welcome original research articles and reviews for submission to this Special Issue. Potential nonlinear technologies include but are not limited to the following:

- Phase-sensitive optical parametric amplification technology;
- Time lens technology;
- Mid-infrared up-conversion technology;
- Terahertz generation and detection technology;
- Quantum enhancement and detection technology;
- Nonlinear optical imaging technology.

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Deadline for manuscript submissions

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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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