Special Issue

Optoelectronic Oscillators (OEO): Principles and Applications

Message from the Guest Editors

Optoelectronic Oscillators (OEOs) are promising solutions for the generation of microwave signals with ultra-low phase noise. This Special Issue aims to provide a comprehensive collection of research that delves into the fundamental principles and diverse applications of OEOs. Aligned with the scope of the journal *Photonics*, which focuses on the science and technology of optics and photonics, this issue seeks to highlight cutting-edge advancements in the design, optimization, and implementation of OEOs. In this Special Issue, original research articles and reviews are welcome. Research areas may include (but need not be limited to) the following:

- Fundamental principles and mechanisms of OEOs.
- Novel designs and configurations of OEOs.
- Performance optimization, including phase noise reduction, tunability enhancement, or side mode suppression.
- Applications of OEOs in sensor networks, navigation and meteorology, synthetic aperture radars, space communications, and frequency delivery over ultra-long distances.
- Integration of OEOs.

Guest Editors

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Deadline for manuscript submissions

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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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