

Special Issue

Terahertz Photonics: Science and Application

Message from the Guest Editors

Terahertz radiation has attracted tremendous interest owing to it having potential applications in imaging and spectroscopy for medical diagnostics and biology, broadband communications, security, defense, and nondestructive testing. Interest in the THz range has recently increased due to the allocation of frequency bands in this region of the spectrum providing large amounts of available bandwidth for both the existing 5G and emerging 6G wireless communications standards. Access to these bands is key for next-generation wireless communications with terabit-per-second speeds. This Special Issue will address the current progress and latest breakthroughs in emergent applications of THz photonics, covering, among others, the following areas of interest:

- THz emitters, CW and pulsed;
- THz photonic detectors and mixers;
- THz surface-structured plasmonics and metamaterials;
- Tunable THz devices;
- THz waveguides, fiber and photonic crystals;
- Photonic-driven antenna arrays for THz beam forming and steering;
- Terahertz biophotonics.

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Deadline for manuscript submissions

closed (31 March 2024)



Photonics

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Impact Factor 1.9
CiteScore 3.5



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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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