

# Special Issue

## Photonics for Emerging Applications in Communication and Sensing II

### Message from the Guest Editors

Photonics play a vital role as a key enabler in emerging and promising applications in communication and sensing. This Special Issue aims to focus on the recent advancements and future challenges in photonic technologies that enable and support these emerging applications. It covers topics such as optical fibers, photonic devices and systems, and signal processing techniques. This Special Issue constitutes the second volume of our previous Special Issue, titled "Photonics for Emerging Applications in Communication and Sensing". We invite papers on a wide range of topics, which include, but are not limited to, the following:

- Silicon passive and active devices for data communication, 5G, sensing, or imaging.
- Optical fiber subsystems for communication, detection, and sensing.
- Photonic signal processing leveraging nonlinear optics for optical networks.
- Digital signal processing techniques for optical transmission systems.
- Photonic integrated circuits for communication, sensing, and computing.
- Optical biochemical sensing systems.
- Cutting-edge developments in optical network technology.

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### Guest Editors

Dr. Guo-Wei Lu

Prof. Dr. Zhenzhou Cheng

Prof. Dr. Ting-Hui Xiao

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### Deadline for manuscript submissions

closed (20 June 2025)



## Photonics

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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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### Editor-in-Chief

Prof. Dr. Nelson Tansu

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