# Special Issue

# Optical Signal Processing for Advanced Communication Systems

### Message from the Guest Editor

With the increasing communication demand in the military and civilian fields, the diversification of communication scenarios makes the frequency band and bandwidth continuously expanded. The signal processing technology based on photonics has become an important enabling technology for expanding communication capacity and improving communication quality by virtue of its advantages of large bandwidth, multi-frequency band, low loss and anti-electromagnetic interference. To further boost the impact of this exciting and rapidly evolving field, this special issue aims to bring together contributions from leading experts in the field to provide effective solutions for signal optical processing in future advanced communication systems. The topics of this special issue include but are not limited to the following:

- Radio over fiber
- Microwave photonic wideband signal generation and reception
- Optical fiber communications
- Microwave photonic communication sensing integrated signal processing
- Direction modulation signal generation

### **Guest Editor**

Dr. Weile Zhai

Electronic Information, Northwestern Polytechnical University, Xi'an 710072, China

### Deadline for manuscript submissions

31 October 2025



# **Photonics**

an Open Access Journal by MDPI

Impact Factor 1.9 CiteScore 3.5



mdpi.com/si/224540

Photonics
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
photonics@mdpi.com

mdpi.com/journal/photonics





## **Photonics**

an Open Access Journal by MDPI

Impact Factor 1.9 CiteScore 3.5



### 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.

### **Editor-in-Chief**

Prof. Dr. Nelson Tansu

School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

#### **Author Benefits**

### **High Visibility:**

indexed within Scopus, SCIE (Web of Science), Inspec, Ei Compendex, CAPlus / SciFinder, and other databases.

### Journal Rank:

CiteScore - Q2 (Instrumentation)

### **Rapid Publication:**

manuscripts are peer-reviewed and a first decision is provided to authors approximately 14.8 days after submission; acceptance to publication is undertaken in 1.9 days (median values for papers published in this journal in the first half of 2025).

