# **Special Issue**

## Coherent Transmission Systems in Optical Wireless Communication

### Message from the Guest Editors

Coherent optical transmission systems are used to transmit high-speed data over long distances using optical fibers. These systems rely on the coherent detection of light signals, which allows for the recovery of both the amplitude and phase of the transmitted signal. The goal of this Special Issue is to address the difficulties and prospects of optical wireless communication with regard to coherent transmission systems, as well as their potential optical solutions, by examining possible development paths, obstacles, and frontier technologies. Additionally, the issue aims to provide a platform to present the latest innovations and research in coherent free space optics. Original research articles and reviews on recent processes and developments will be welcomed. Topics include but are not limited to the following:

- Free space optics (FSO);
- Optical wireless communication (OWC);
- Visible light communication (VLC);
- Optical modulator;
- Optical detector;
- New modulation format and technology;
- Advanced DSP algorithm;
- Machine-learning-based algorithm.

### **Guest Editors**

Dr. Jianyang Shi Prof. Dr. Junwen Zhang Dr. Hui Chen Dr. Jiao Zhang

### Deadline for manuscript submissions

closed (10 July 2024)



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

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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.

### Editor-in-Chief

Prof. Dr. Nelson Tansu School of Electrical and Electronic Engineering (EEE), The University of Adelaide, Adelaide, SA 5005, Australia

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