

# Special Issue

## New Advances in Optical Wireless Communication

### Message from the Guest Editor

Optical wireless communication (OWC) is a crucial research emphasis in the development of next-generation data acquisition and transmission, offering significant applications in either free space or underwater scenarios. However, current OWC systems encounter many challenges from both technical and engineering perspectives. This Special Issue invites authors working in relevant fields to submit manuscripts that introduce the recent advances in “optical wireless communication”. All types of paper are acceptable, whether theoretical, numerical, or experimental. Topics include, but are not limited to, the following:

- Designs of visible-light/infra-red/ultra-violet OWC systems;
- Estimations and modeling for free-space/indoor/underwater OWC channels;
- Optical wireless signal processing;
- Code and modulation schemes in OWC systems;
- Micro-LED array based optical transmitters;
- Photon-counting detection;
- Power control and resource allocation in OWC systems;
- High-rate and energy-efficient OWC techniques;
- Massive and random access OWC networks;
- Optical intelligent reflecting surface;
- Signal compensation under turbulence, beam misalignment, beam wander, etc.

### Guest Editor

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### Deadline for manuscript submissions

10 August 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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