

Special Issue

Trends in Optical Wireless Communications

Message from the Guest Editors

Driven by the radio-frequency spectrum crunch and the demands of 6G and IoT, optical wireless communication (OWC) has emerged as a pivotal complementary technology. This Special Issue seeks high-quality contributions that advance the theoretical and practical frontiers of OWC. It will cover the full spectrum from core physical-layer research to system integration, highlighting solutions for channel modeling, hybrid networks, and overcoming atmospheric/underwater challenges. The scope of this issue extends to disruptive application prospects, including ultra-secure indoor networks, smart city infrastructure, industrial IoT, deep-space links, and augmented reality systems.

Topics of interest include, but are not limited to, the following:

- Advanced modulation and coding for OWC;
- Li-Fi and hybrid RF/OWC systems;
- Underwater and vehicular OWC;
- Free-space optics (FSO) for backhaul and satellite networks;
- Visible light communication (VLC) and light fidelity;
- Novel materials and devices (e.g., micro-LEDs, receivers);
- Beam steering, alignment, and tracking techniques;
- AI/ML for optimization and performance enhancement;
- Integrated optical communication and sensing (OWC-ISAC).

Guest Editors

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Deadline for manuscript submissions

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. Sensors organizes Special Issues devoted to specific sensing areas and applications each year.

Editor-in-Chief

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