Special Issue

Emerging Technologies in Optical Wireless Communications for Next-Generation Connectivity, Joint Communication and Sensing

Message from the Guest Editors

In this Special Issue, we aim to address the evolving role of OWC in hybrid RF/optical networks, where the synergy between optical and RF systems can address the unique challenges of dense urban environments, complex indoor settings, and secure networks. Topics of interest include, but are not limited to, the following:

- Channel modeling and characterization for indoor and outdoor optical wireless environments;
- Advanced modulation, coding, and synchronization techniques for OWC;
- Hybrid RF/optical network architectures and seamless integration strategies;
- Al- and ML-driven enhancements for optimization in OWC and JCAS;
- Energy-efficient and low-power design approaches for OWC systems;
- Joint communication and sensing (JCAS) applications in OWC;
- Security and privacy mechanisms for high-speed optical.

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Electronics is a multidisciplinary journal designed to appeal to a diverse audience of research scientists, practitioners, and developers in academia and industry. The journal is devoted to fast publication of latest technological breakthroughs, cutting-edge developments, and timely reviews of current and emerging technologies related to the broad field of electronics. Experimental and theoretical results are published as regular peer-reviewed articles or as articles within Special Issues guestedited by leading experts in selected topics of interest.

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