Special Issue

Advancements in Optical Fiber Communication and Networks

Message from the Guest Editors

This Special Issue focuses on the emerging mainstream technologies applied in optical fiber communication systems.

- Subsystems and systems for optical fiber communications and networks;
- Theory, design, fabrication, characterization, and connectivity of the transmission medium, including hollow-core fibers, few-mode fibers, multi-core fibers, etc.;
- Active and passive devices and components, including lasers, amplifiers, fan-in fan-out devices, (de-)multiplexers, mode field adapters, wavelength select switches, photodetectors, receivers, etc.;
- Pulse shaping or modulation techniques for optical fiber communications;
- Spectra extension for wideband optical fiber transmission;
- Space-division multiplexing for optical fiber transmission;
- Integrated sensing and communication in optical fibers;
- Artificial intelligence for optical fiber communication;
- Artificial intelligence-driven optical fiber transmission systems;
- Digital twin optical networks;
- Digital signal processing techniques for long-distance and short-reach applications;
- Optical network design, optimization, and monitoring;
- Other emerging technologies and trends in optical fiber communication and networks.

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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.

Editor-in-Chief

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