Special Issue

Exploring Optical Fiber Communications: Technology and Applications

Message from the Guest Editor

With the rapid development of cloud computing, big data, the Internet of Things, and other new technologies, we have entered an era of digitalization and informatization. The number of internet users has been steadily increasing, which has accelerated the exponential expansion of data services. A prominent focus of current research is how to further enhance spectral efficiency and achieve high-speed, high-capacity data transmission. Optical fiber communication plays a key role in increasing data transmission rates, reducing costs, and enhancing system reliability, making it an indispensable part of modern communication networks. At present, key breakthroughs in optical fiber communication technology include high-order modulation formats, polarization multiplexing, wavelength division multiplexing, etc. Optical fiber communication can be widely applied in the fields of the internet and telephone networks, as well as in cable television, data centers, industrial production site monitoring, traffic monitoring and command, and more. This Special Issue aims to publish selected contributions on technology and applications of fiber optic communications.

Guest Editor

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