Special Issue

Fiber Communication Technology: Latest Advances and Prospects

Message from the Guest Editor

It is well known that, nowadays, optical fiber communications support global communication networks, which originates from Charles K. Kao's proposal of using optical fibers as a light transmission medium in 1966. By utilizing different degrees of freedom of the photon, society has made tremendous progress over the past half century. They have explored multiple degrees of freedom of the photon (time, wavelength, amplitude, phase, polarization, and space) to significantly reduce the cost/bit for data transmission, by increasing the capacity/fiber through multiplexing and reducing the size and power using integration. This Special Issue aims to explore the technology that enables optical fiber communication. It will focus on the state-of-the-art advances from optical fiber communication technology networking applications, as well as the latest advances and prospects. The topics of interest include, but are not limited to, the following areas:

- Direct and coherent detection communication systems;
- Advanced modulation format, shaping technology, and digital signal processing;
- Optical networking for data center applications.

Guest Editor

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Optics (ISSN 2673-3269) aims at establishing *Optics* as a leading journal for publishing high impact fundamental research and applications in optics field with a fast processing time and high quality service. The journal particularly welcomes both theoretical (simulation) and experimental research within our journal's scope. We encourage scientists to publish their experimental and theoretical results in as much detail as possible. So, there is no restriction on the length or pages of the papers. The full experimental details must be provided so that the results can be reproduced. Electronic files and software regarding the full details of the calculation or experimental procedure, if unable to be published in a normal way, can be deposited as supplementary electronic material.

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