



Optical Fiber Transmission Systems

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Message from the Guest Editor

Dear Colleagues,

The capacity of optical transmission systems based on single-mode fibers (SMF) has grown by about three orders of magnitude over the last twenty years, reaching the so-called nonlinear Shannon limit. Further improvement of the capacity of an optical channel are offered by increasing the optical bandwidth, the use of advanced modulation formats, reducing the fiber nonlinearity, and the adoption of space-division multiplexing (SDM), together with the more common multiplexing techniques of wavelength (WDM) and of polarization (PDM).

The Special Issue on Optical Fiber Transmission Systems aims to illustrate the most advanced techniques used to increase the capacity of an optical channel, covering the following topics:

- SDM techniques in multimode and multicore fibers;
- Ultra-wide band optical systems;
- Specialty optical fibers;
- Advanced modulation formats.

