



Advanced Optical-Fiber-Related Technologies

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submissions:

closed (20 May 2025)

Message from the Guest Editor

The purpose of this Special Issue is to provide an overview of recent experimental and theoretical achievements in optical fiber technologies. This Special Issue welcomes contributions from theoretical, numerical, and experimental studies, from fundamentals to application studies including fiber communications, fiber lasers, fiber sensors, fiber Bragg gratings, LPGs, fiber materials and design. Potential topics include, but are not limited to, the following:

- Fiber lasers and amplifiers.
- Raman fiber lasers and amplifiers.
- Brillouin fiber lasers and amplifiers.
- Radiation-balanced (athermal) fiber lasers.
- Fiber frequency comb sources.
- Fiber supercontinuum sources.
- Photonic crystal fibers.
- Chalcogenide fibers.
- Tellurite fibers.
- Fluoride fibers.
- New fiber materials and designs.
- Laser cooling in optical fibers.
- Nonlinear effects in optical fibers.
- Fiber Bragg grating and LPGs.
- Fiber switching, memory, and signal processing.
- Long-haul transmission systems.
- Fiber local area networks.
- Fiber sensors and instrumentation.
- Waveguide quantum electrodynamics.





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Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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