Special Issue

Characterization and Applications of Specialty Optical Fibers

Message from the Guest Editor

Specialty optical fibers play an important role in modern everyday life, either in their special waveguide structure or novel material composition, and have become the heart of all fiber-based advanced photonic devices and components. The field of specialty optical fibers requires different disciplines' expertise and skills, this Special Issue aims to document leading-edge theoretical and experimental work in specialty optical fiber (SOF) fabrication, characterization, and application. Both original research and review papers are welcome, covering topics including but not limited to Rare earth optical fibers; Multicore optical fibers; Micro-structured optical fibers; Hollow-core photonic crystal fibers; Chalcogenide photonic crystal fibers; Fluoride optical fibers; Nanostructured soft-glass optical fibers; Plastic optic fibers; Large-mode-area fibers; Mid-infrared optical fibers; Highly nonlinear optical fibers; Optical fibers with low nonlinearity; Metal oxide glass-based optical fibers; Fiber probes for biosensing; Metal nanoparticle-doped optical fibers; Radiation-hardened/sensitive optical fibers.

Guest Editor

Dr. Mario F. S. Ferreira
Department of Physics, University of Aveiro, 3810-193 Aveiro, Portugal

Deadline for manuscript submissions

closed (25 May 2025)

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Fibers
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
fibers@mdpi.com

mdpi.com/journal/fibers

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About the Journal

Message from the Editor-in-Chief

Fibers is intended as an integrative platform, bringing together specialists with expertise concerning a large range of biological, synthetic, metallic and mineral fibers. The intent is to bring together scientists who would otherwise be unlikely to encounter each other's findings. By facilitating communication across specialties, the journal will advance understanding of the underlying commonality of many physical and chemical aspects of fibers.
We welcome submission of manuscripts from a diverse range of disciplines relating to many types of fibers utilizing a variety of research approaches.

Editor-in-Chief

Prof. Dr. Martin J. D. Clift
In Vitro Toxicology Group, Institute of Life Sciences 1, Swansea University Medical School (SUMS), Swansea SA2 8PP, Wales, UK

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