

# 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)



## Fibers

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.9  
CiteScore 7.4



[mdpi.com/si/216653](https://mdpi.com/si/216653)

*Fibers*

Editorial Office

MDPI, Grosspeteranlage 5

4052 Basel, Switzerland

Tel: +41 61 683 77 34

[fibers@mdpi.com](mailto:fibers@mdpi.com)

[mdpi.com/journal/](https://mdpi.com/journal/)

[fibers](https://mdpi.com/journal/fibers)





# Fibers

---

an Open Access Journal  
by MDPI

---

**Impact Factor 3.9**  
**CiteScore 7.4**



[mdpi.com/journal/  
fibers](https://mdpi.com/journal/fibers)



## 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

---

### Author Benefits

#### High Visibility:

indexed within Scopus, ESCI (Web of Science), Ei Compendex, PubAg, CAPlus / SciFinder, Inspec, and other databases.

#### Journal Rank:

JCR - Q2 (Materials Science, Multidisciplinary) / CiteScore - Q1 (Civil and Structural Engineering)

#### Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 23.3 days after submission; acceptance to publication is undertaken in 5.8 days (median values for papers published in this journal in the first half of 2025).