

Special Issue

Optical Fiber Communications

Message from the Guest Editor

Optical fiber communication systems have been deployed worldwide since 1980, and have revolutionized the field of telecommunications. The capacity of such systems has been continuously increasing. Over the last three decades, the aggregate bit-rate of optical transmission systems based on single-mode fiber (SMF) has increased by a factor of four orders of magnitude by means of multiplexing techniques that use time, wavelength, and polarization as a degree of freedom to encode information. In addition to multiplexing, coherent transmission techniques also allow to increase the aggregate bit-rate of optical communications systems by exploiting both the phase and the amplitude of the light to carry information. As today's wavelength-division multiplexing (WDM) coherent optical communication has already taken advantage of all degrees of freedom of a lightwave in a single-mode fiber, further multiplicative growth must explore new degrees of freedom that do not exist in SMFs.

Guest Editor

Dr. Mario F. S. Ferreira

Department of Physics, University of Aveiro, 3810-193 Aveiro, Portugal

Deadline for manuscript submissions

closed (1 August 2018)



Fibers

an Open Access Journal
by MDPI

Impact Factor 3.9
CiteScore 7.4



mdpi.com/si/9203

Fibers

Editorial Office

MDPI, Grosspeteranlage 5

4052 Basel, Switzerland

Tel: +41 61 683 77 34

fibers@mdpi.com

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).