



## Specialty Optical Fiber-Based Sensors

Guest Editor:

**Prof. Dr. Jian Wang**

Wuhan National Laboratory for  
Optoelectronics, Huazhong  
University of Science and  
Technology, Wuhan 430074,  
China

Deadline for manuscript  
submissions:

**30 April 2024**

### Message from the Guest Editor

Novel specialty optical fibers refer to optical fibers that have been engineered in materials and structures and undergone post-processing to yield novel functionalities and applications. Specialty optical fibers composed of different materials offer additional possibilities for improving sensor sensitivities by exploiting the properties of inserted materials (glass, metal, semiconductor, polymer, etc.). Sensor performances are furthermore improved by applying post-processing techniques to the fibers in order to enhance light-matter interactions. Extended sensing functionalities can be achieved by specialty optical fibers, accessing the space domain of light waves (few-mode fibers, multi-mode fibers, multi-core fibers, etc.). The associations of specialty optical fibers with robust and/or advanced sensing systems (fiber gratings, fiber interferometers, fiber metasurfaces, plasmonic devices, etc.) lead to new sensing possibilities.

The aim of this Special Issue is to collect and highlight the latest advances in fiber sensors based on specialty optical fibers and their applications.

For more details, please visit [here](#).





*sensors*



an Open Access Journal by MDPI

## Editor-in-Chief

### **Prof. Dr. Vittorio M. N. Passaro**

Dipartimento di Ingegneria  
Elettrica e dell'Informazione  
(Department of Electrical and  
Information Engineering),  
Politecnico di Bari, Via Edoardo  
Orabona n. 4, 70125 Bari, Italy

## Message from the Editor-in-Chief

*Sensors* is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

## Author Benefits

**Open Access** :— free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

**High Visibility**: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [MEDLINE](#), [PMC](#), [Ei Compendex](#), [Inspec](#), [Astrophysics Data System](#), and [other databases](#).

**Journal Rank**: JCR - Q2 (*Instruments & Instrumentation*) / CiteScore - Q1 (*Instrumentation*)

## Contact Us

---

*Sensors*  
MDPI, St. Alban-Anlage 66  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/sensors](http://mdpi.com/journal/sensors)  
[sensors@mdpi.com](mailto:sensors@mdpi.com)  
[@Sensors\\_MDPI](https://twitter.com/Sensors_MDPI)