



an Open Access Journal by MDPI

## The Fiber-Optic Sensing for Extreme Physics and Its Measurement Applications for Engineering and Science

Guest Editor:

**Prof. Dr. Xinwan Li**

State Key Laboratory of  
Advanced Optical  
Communication Systems and  
Networks, Department of  
Electronic Engineering, Shanghai  
Institute for Advanced  
Communication and Data  
Science, Shanghai Jiaotong  
University, Shanghai 200240,  
China

Deadline for manuscript  
submissions:

**closed (30 June 2024)**

### Message from the Guest Editor

Dear Colleagues,

Fiber-optic systems are the backbone of communication systems, carrying most of the world's data traffic. Fiber optics has also played a key role in sensing applications such as physical, chemical, biological, and environmental sensors. Fiber optical sensing technology is expected to grow significantly due to the rapid progress in information technology, mechanic dynamics, ocean engineering, bio-medicine, aerospace, and physics, chemicals, and material science. The Special Issue will highlight recent advances in fiber optic precise sensing technology and distributed measurement methods in both of engineering and science. Topics include, but not are limited to the following:

- Fiber-optics vector sensing system and networks
- Fiber-optics advanced sensing technologies for chemical, bio-medicine, and materials measurement
- intelligent desert/water/land (environmental measurement)
- deep sea/deep space sensing
- structure health monitoring for high speed rail or super high power
- flexible robotics/mechanical arms

Notice: These articles will be published on this special issue and **printed in book format**.



[mdpi.com/si/106589](https://mdpi.com/si/106589)

Special Issue



*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 (*Chemistry, Analytical*) / CiteScore - Q1 (Instrumentation)

## Contact Us

---

*Sensors* Editorial Office  
MDPI, Grosspeteranlage 5  
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)  
[X@Sensors\\_MDPI](#)