

## Special Issue

# Fiber Optical Communication and Sensing Systems

### Message from the Guest Editor

Dear Colleague, 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 Bragg gratings have been used for dispersion compensation in communication systems as well as for various sensing applications. Fiber optical sensing technology is expected to grow significantly due to the rapid progress in optoelectronics and communication fields. The Special Issue will highlight recent advances in fiber optic communications and sensing technologies. Topics include, but not are limited to the following:

- Coherent communication systems and digital signal processing
- Nonlinear frequency division multiplexed (NFDM) systems and OFDM systems
- Fiber Bragg gratings for communication and sensing
- Physical, mechanical, acoustic, and electromagnetic sensors
- Micro- and nano-structured fiber sensors
- Multi-mode and multi-core fibers for communication and sensing
- Metro, data-center, and long haul fiber optic networks
- AI/machine learning for communication and sensing

---

### Guest Editor

Dr. Shiva Kumar

Department of Electrical & Computer Engineering, McMaster University, 1280 Main Street West, Hamilton, ON, Canada

---

### Deadline for manuscript submissions

closed (30 May 2022)



## Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



[mdpi.com/si/61126](https://mdpi.com/si/61126)

*Sensors*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[sensors@mdpi.com](mailto:sensors@mdpi.com)

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





# Sensors

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.5  
CiteScore 8.2  
Indexed in PubMed



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



## About the Journal

### 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.

---

### 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

---

### 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 and Instrumentation) / CiteScore - Q1 (Instrumentation)