







an Open Access Journal by MDPI

# **Fiber Optic Sensing Technology**

Guest Editor:

#### Dr. Marcel Faikus

Department of Telecommunications, Faculty of Electrical Engineering and Computer Science, VSB-Technical University of Ostrava, 17. Listopadu 2172/15, 70800 Ostrava, Czech Republic

Deadline for manuscript submissions:

closed (31 October 2020)

### Message from the Guest Editor

Fiber-optic sensing technologies offer a high potential for utilization due to their properties compared to conventional sensor types. This Special Issue will explore new designs and improved sensing approach architectures to achieve higher measurement accuracy and resolution, and increase the functionality of sensors for measuring multiple quantities at once. This Special Issue will focus on the following fiber optic sensing technologies:

- Fiber-optic and polymer Bragg gratings
- Distributed systems based on Rayleigh, Raman, and Brillouin scattering
- Fiber-optic interferometric polarimetric and systems
- Intensity sensors
- Micro- and nano-structured fiber sensors
- Fiber specklegram sensors
- New concepts for photonic sensing

Another goal is to extend the usability of these technologies and improve their principles for sensing applications in the following areas:

- Biomedical applications
- Structural health monitoring
- Automobile, train, and air transport
- Measurement of electrical and magnetic quantities
- Very high-temperature measurement
- Measurement in the chemical industry
- Use of smart materials for fiber-optic 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**