



an Open Access Journal by MDPI

Fiber Optic Sensing Technology

Guest Editor:

Dr. Marcel Fajkus

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 and polarimetric 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

21**a**s

- Very high-temperature measurement
- Measurement in the chemical industry
- Use of smart materials for fiber-optic sensors
- Perimetric ap





an Open Access Journal by MDPI

Editor-in-Chief

Message from the 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

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 mdpi.com/journal/sensors sensors@mdpi.com X@Sensors_MDPI