



Recent Advances in Fiber Bragg Grating Sensing

Guest Editor:

Dr. Antreas Theodosiou

Photonics Research Center
(PRC), Lumoscribe,
Anthipoloxagou Georgiou M.
Savva 12, Geroskipou, Paphos
8201, Cyprus

Deadline for manuscript
submissions:

closed (30 June 2022)

Message from the Guest Editor

Dear Colleagues,

Fiber Bragg gratings (FBG) have been used in different applications for more than 40 years. They are considered reliable sensing elements and fiber laser components, while their sensing characteristics could be adjusted according to the hosting fiber material. This Special Issue aims to cover a broad spectrum regarding FBG sensing technology in the form of regular and review papers. Topics of interest include but are not limited to the following:

- Grating structures, tilted Bragg gratings, long period gratings, chirped gratings;
- FBGs in specialty optical fibers (polymer fibers, silica fibers, sapphire fibers, etc.);
- Advanced FBG-based mechanical and physical sensors;
- Advanced FBG-based biomedical, chemical, and environmental sensors;
- Performance of FBG systems in real environments;
- Demodulation algorithm and signal processing of complexed FBG sensors;
- FBG-based monolithic fiber laser systems;
- Performance of FBGs in harsh environments;
- FBG applications in the oil and gas industry, robotics, structural health monitoring, aerospace missions, civil structure, smart textiles, and other areas.





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 and Instrumentation) / 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](#)