



Recent Advances in Fiber Bragg Grating Sensing

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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.





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Message from the Editor-in-Chief

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