Special Issue

Progress in Fiber Bragg Gratings Sensor

Message from the Guest Editors

FBGs can be of different types, including uniform fiber Bragg grating (UFBG), long-period fiber Bragg grating (LFBG), chirped fiber Bragg grating (CFBG), tilted fiber Bragg grating (TFBG), ultra-weak fiber Bragg grating (uwFBG), or phase-shifted fiber Bragg grating (PS-FBG), and have drawn researchers' attention in previous decades. This research topic aims to present the most recent research progress in manufacturing methods, model modeling, special design, theoretical analysis, experimental investigations, demodulation methods and applications, device development, sensing performance optimization, and demodulation methods for innovative FBG sensors. Potential topics include, but are not limited to, the following:

- Manufacturing methods for FBGs;
- Special design for FBGs;
- Physical sensors, biosensors and chemical sensors based on FBGs;
- Special or multi-functional FBG sensors;
- FBG sensors and devices;
- Demodulating methods and algorithms based on FBG sensors;
- Multiplexing methods for FBG sensors;
- Signal processing for FBG sensors;
- Multi-DOF sensing based on FBGs;
- Structural health monitoring and other applications of FBG sensors.

Guest Editors

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Deadline for manuscript submissions

closed (30 September 2024)

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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