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## Fiber Bragg Grating Based Sensors and Systems

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### Message from the Guest Editor

Dear Colleagues,

Today, no one doubts that fiber Bragg gratings have become the most used tool for measuring various physical parameters, the structural integrity of engineering systems, and biological activity of living systems. Classical approaches to measurements based on temperature and mechanical deformations and changes in the refractive index of the surrounding sensor environment are actively developing. One of the winning directions of these studies is the transition to microwave photonics measurement systems. The second promising direction is the development and creation of addressable FBGs.

This issue is dedicated, but not limited to:

- Modeling and simulation of FBGs;
- Fabrication and applications of FBGs;
- Multiparameter FBG sensors;
- Addressable and Nonsymmetrical FBGs;
- Sensors on chirped, tilted, etc. FBGs;
- High-speed optoelectronic interrogation methods;
- Microwave photonics interrogation methods;
- FBG sensors in dynamic and quasistatic measurements;
- FBGs in optical fibers of different classes;
- FBG sensors in DTS, DTSS, and DAS systems;
- FBG sensors in medicine and living systems monitoring;
- Biological FBG sensors;



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Prof. Dr. Oleg G. Morozov  
Guest Editor

Special Issue



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## Message from the Editor-in-Chief

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