Special Issue

Novel Sensor Technologies for Civil Infrastructure Monitoring

Message from the Guest Editor

The increasing frequency of harsh environmental and climatic conditions and long design reference periods have had an adverse impact on civil infrastructures. Accordingly, it is critical to accurately and precisely monitor the mechanical behavior of civil infrastructures. Civil infrastructure monitoring with the aim of early damage detection and acquiring the data required for engineering construction not only prevents sudden infrastructure collapse but also increases service life and sustainability. Various types of novel sensors with new principles, new materials or new technologies, including the following, would provide new ways to assist in the green and high-quality development of civil engineering infrastructures:

- Graphene-based sensors;
- Piezoceramic sensors;
- Semi-distributed/distributed optical fiber sensors;
- FBG-based 3D-printed/FBG sensors;
- Image-/video-/laser-based sensors;
- Smart/intelligent sensing methods;
- Multi-sensor fusion methods;
- IoT-based monitoring technology.

Guest Editor

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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.

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