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Real-Time Monitoring Technology for Built Infrastructure Systems

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Message from the Guest Editors

Real-time detection of built infrastructure systems is rapidly gaining prominence for traditional (e.g., railways, bridges, pipelines) and emerging (e.g., wind turbines) infrastructure. While damage detection and structural health monitoring remain key questions, detection of other features of interest includes control, repair/rehabilitation, and other lifetime performance measures. This Special Issue addresses new methods, infrastructure demands, feature development, and related implementation around the question of ‘real-time’, in its widest interpretation. The topics include but are not limited to:

- Recursive methods for real-time detection;
- Model updating;
- Digital twinning;
- Sensor placement strategies;
- Sensor comparison;
- Monitoring design;
- Novel features of interest;
- Creation of robust detection of markers;
- Artificial Intelligence;
- Guidelines of reproducibility and accuracy;
- Quantification and qualification of uncertainty;
- Health-monitoring-informed decision support;
- Surrogate modeling applications;
- Advanced computer vision.



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Special Issue



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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.

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