



Recent Advances in Sensing and Data Centric Methods for Structural Health Monitoring and Resilience

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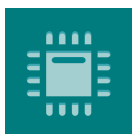
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Message from the Guest Editors

Potential research contributions pertaining to this topic include but are not limited to the following areas:

- New and novel innovations in structural health monitoring.
- IoT and smart infrastructure.
- SHM of historic and ageing structures.
- AI-based methodologies, such as deep learning neural networks, big data, digital twins.
- System identification.
- Surrogate models.
- Optimization techniques.
- Probabilistic methods, such as uncertainty quantification, variability assessment, especially combined with AI methods.
- Various machine learning tools.
- Dynamic response prediction of highly nonlinear systems.
- Feature extraction schemes.
- Resilience of civil infrastructure in a life cycle.
- Resiliency and recoverability of structures and isolation-structure systems.
- Assessing the impact of SHM on urban infrastructure resilience.
- Utilization of data analytics schemes in structural control and seismic isolation systems.
- Data driven method for structural damage identification.
- Reliability and safety of engineering structures.
- Distributed sensors and big data in SHM.





sensors



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Message from the Editor-in-Chief

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