



Sensor Networks in Structural Health Monitoring: From Theory to Practice

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Message from the Guest Editors

The aim of this Special Issue is to discuss the latest advances in the field of sensor networks for SHM. The focus lies in both active research on the theoretical foundations of sensor networks, as well as technological developments that might define the next generation of SHM. Applications in structural dynamics, earthquake engineering, mechanical and aerospace engineering, as well as other relevant areas, will be accepted.

Topics relevant to the session include, but are not limited to:

- Wired and wireless sensor networks
- Structural state estimation and sensor fusion
- Virtual Sensing and fault-tolerant sensor networks
- Optimal strategies for sensor placement and fusion
- Inverse methods for big data analysis and classification
- Linear and nonlinear system identification
- Model updating and verification,
- Uncertainty quantification in model selection and parameter estimation
- Feature extraction
- Extraction of performance indicators
- Damage detection/localization/assessment
- Special topics in structural deterioration, including fatigue, wear, etc.





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Message from the Editor-in-Chief

I encourage you to contribute research and comprehensive review articles for publication in Journal of Sensors and Actuator Networks (JSAN), an international, open access journal which provides an advanced forum for research findings in areas of sensors and actuators. The journal publishes original research articles, reviews, conference proceedings (peer reviewed full articles) and communications. I am confident you will find the journal contributes to enhancing understanding of sensors and actuators and fostering applications of sensor-based measurements and effective actuator incorporation.

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