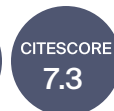




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Smart Sensing in Structural Health Monitoring of Advanced Composite Structures

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Deadline for manuscript
submissions:

closed (15 January 2024)

Message from the Guest Editors

Dear Colleagues:

This Special Issue will report recent advances in key topics of emerging computational techniques for shape sensing and SHM of composite materials/structures. It will unite diverse research outcomes in numerical simulations and experimental implementations of new smart sensing methods for in situ full-field monitoring of deformations, strains, and stresses encountered within composites under operational conditions.

In this Special Issue, original research articles and reviews are welcome. Research areas may include (but are not limited to) the following:

- Numerical models for smart sensing and SHM of composites;
- Real-time shape and stress sensing of sandwich structures;
- Experimental investigation of deformation reconstruction algorithms;
- Theoretical/experimental developments in inverse finite element method (iFEM);
- Damage diagnosis and prognosis methods based on full-field data;
- Crack/damage/delamination localization in composites;
- Vibration/modal model reconstruction of composites based on discrete strains;
- New sensor placement models using optimization techniques;
- Structural digital twin for smart sensing of deformation/stress/damage.



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Special Issue



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Message from the Editor-in-Chief

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