Special Issue

Research on Acoustic Emission in Composite Materials: From Fundamental to Practical Applications

Message from the Guest Editors

This Special Issue is dedicated to the exploration of acoustic emission (AE) phenomena within composite materials, bridging fundamental understanding with practical engineering applications. Acoustic emission testing has emerged as a pivotal nondestructive evaluation (NDE) technique, offering significant potential in the monitoring and characterization of damage initiation and progression within composite structures.

This Special Issue seeks original research contributions that advance both theoretical and experimental aspects of AE in composite materials, enhancing the reliability of diagnostics and prognostics in real-world applications. Topics of particular interest include, but are not limited to, the following:

Fundamental mechanisms of AE generation in composite materials;

Innovative methodologies for AE signal analysis and damage characterization;

Case studies illustrating practical AE applications in aerospace, automotive, civil, and renewable energy sectors.

Numerical and analytical modeling of AE events in composites.

We look forward to receiving your valuable contributions to this issue.

Guest Editors

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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