



Application of Ultrasonic Waves and Sensing Technologies in Nondestructive Testing and Evaluation

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Message from the Guest Editors

Dear Colleagues,

Recent advances have dramatically changed the ultrasonic wave analysis and testing methods and expanded applications of ultrasonic NDT to new and complex materials. Nonlinear ultrasonic wave and diffuse wave analysis demonstrate unprecedented sensitivity and capability to identify microdamage in complex media.

This Special Issue will cover a wide range of research topics that are relevant to ultrasonic NDT, including, but not limited to, the following:

- Ultrasonic NDT for material characterization and damage evaluation;
- Ultrasonic guided wave;
- Nonlinear ultrasonic wave;
- Diffuse ultrasonic wave;
- Thermal effect on ultrasonic wave measurements and analysis;
- Laser ultrasonic testing;
- Air-coupled sensing;
- Analytical and numerical modeling of ultrasonic waves in complex media;
- New applications of ultrasonic NDT, such as NDT for additive manufacturing, batteries, metamaterials, etc.;
- Machine learning for ultrasonic data processing.





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Message from the Editor-in-Chief

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