



Numerical Modeling of Electromagnetic and Ultrasonic Waves for Nondestructive Evaluation

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Message from the Guest Editors

This Special Issue is dedicated to the numerical modeling of NDE problems, specifically focusing on electromagnetic and ultrasonic methods. We are seeking articles which use numerical modeling to aid the inspection of complex geometries, multimaterial structures, and other challenging inspection problems. Of special interest are the following topics:

1. Numerical methods including finite element, boundary element, finite difference etc.
2. Sensor modeling.
3. GPU-accelerated numerical simulation of large problems.
4. Numerical methods for SHM.
5. Numerical electromagnetic inspection methodologies including eddy current testing, magnetic flux leakage, magnetic Barkhausen testing, and ground-penetrating radar.
6. Numerical ultrasonic inspection methodologies including conventional bulk waves, TOFD, guided waves, surface waves, and novel methodologies.





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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.

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