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# Acoustics and Vibrations Analyses of Materials at Different Scales: Experimental and Numerical Approaches

Guest Editor:

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#### Message from the Guest Editor

This Special Issue aims at providing a broad coverage of the recent theoretical, numerical, and experimental approaches to various problems related to acoustics and vibrations. Vibrations can occur spontaneaously or can be the result of anomalies in materials and structures at different scales. Thus, several methodologies that rely on the evaluation of the acoustic behavior and vibrational characteristics of the system can provide excellent insight into its dynamical properties as well as about its progress towards certain damage conditions. Therefore, this Special Issue welcomes research studies that evaluate the vibrational response and assess the state of materials and structures at different scales. Both experimental investigations and theoretical and computational studies are appreciated.

- acoustics
- vibrations
- acoustic emission
- damage
- frequency evolution
- modal analysis









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# **Editor-in-Chief**

#### Message from the Editor-in-Chief

**Prof. Dr. Giulio Nicola Cerullo** Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32, 20133 Milano, Italy 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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