

## Special Issue

# Advanced Materials for Noise and Vibration Control

### Message from the Guest Editors

The aim of this Special Issue is to showcase recent advances in noise and vibration control through innovative theoretical, numerical, and experimental approaches. With the increasing demand for quieter and more efficient systems in engineering applications, novel techniques such as acoustic metamaterials (AMMs), acoustic black holes (ABHs), negative-stiffness mechanisms, and active/passive hybrid methods have attracted significant attention. This Special Issue welcomes contributions addressing structural design optimization, analytical and numerical modeling, experimental validation, and system-level integration in the context of noise and vibration mitigation. Topics of interest include, but are not limited to, wave manipulation, vibration isolation, sound absorption, damping enhancement, and active noise control. Additionally, the scope extends beyond traditional suppression strategies to include the functional utilization of vibrations and acoustic energy, such as energy harvesting and sensing applications. Interdisciplinary studies combining materials science, mechanics, and acoustics are also encouraged.

### Guest Editors

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### Deadline for manuscript submissions

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## Materials

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## About the Journal

### Message from the Editor-in-Chief

*Materials* (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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