

## Special Issue

# Acoustic and Mechanical Metamaterials: Recent Advances

### Message from the Guest Editor

It is well known that acoustic metamaterials are usually designed to effectively manipulate acoustic waves. On the other hand, mechanical metamaterials are used not only for their mechanical aspects such as auxeticity, shape morphing, and energy absorption, but in many cases, they are used for their excellent capability to manipulate acoustic waves. This is why there is a relatively broad overlap of research in the fields of acoustic and mechanical metamaterials. In this Special Issue, we aim to explore the latest advances in the design and manufacture of acoustic and mechanical metamaterials. This Special Issue welcomes original research papers and review articles covering all relevant topics, including but not limited to:

- Pentamodes;
- Double-negative acoustic metamaterial;
- Auxetic metamaterials;
- Cosserat metamaterials;
- Split-ring resonators;
- Phononic crystals;
- Superlenses;
- Metamaterials with negative compressibility;
- Willis materials.

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### Guest Editor

Dr. Reza Hedayati

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### Deadline for manuscript submissions

20 February 2025



## 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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### Editor-in-Chief

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