Special Issue

Elastic and Thermal Metamaterials: Novel Properties and Applications

Message from the Guest Editors

Metamaterials are synthetic composite materials with artificial structures that are specifically designed to have intriguing properties in controlling physical fields, and have enabled a wide range of new applications. In the last few years, there has been tremendous progress made in realizing artificial metamaterials and metastructures both in theoretical and experimental aspects, for example in electromagnetic and acoustic waves. The studies on elastic metamaterials, particularly for seismic waves, and also thermal metamaterials are relatively recent. A viable strategy may offer a potential solution that complements current civil engineering solutions to ensure the safety of buildings and infrastructures. This Special Issue aims to further focus on elastic and thermal metamaterials, presenting new discoveries in relevant subjects through new theoretical concepts and design approaches, new numerical simulations, experimental implementations, and various novel applications. This Special Issue will serve as a platform for researchers from different disciplines to bring together recent scientific advances to demonstrate what can be done and what can be envisaged in the future.

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Deadline for manuscript submissions

closed (10 July 2023)



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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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