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Recent Advances in the Field of Mechanical Metamaterials and Their Associated Applications and Fabrication Techniques

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Message from the Guest Editors

Dear Colleagues,

Mechanical metamaterials with their unique and tailorable characteristics are receiving increased attention for a wide range of applications, such as energy absorption, functional load-bearing, indentation resistance, tissue engineering biomaterials, and enhanced vibro-acoustics. The recent advancements in metamaterials are largely driven by developments in modern manufacturing technologies, such as additive manufacturing (3D printing). As a result, novel metamaterials are emerging from a variety of materials, including metals, thermoplastic, and ceramics.

In addition to modern manufacturing technologies, the application of computational modelling techniques is critical in enabling a comprehensive understanding of the behaviour of metamaterials.

The aim of this Special Issue is to highlight recent advances in the field of mechanical metamaterials and their associated applications and fabrication techniques. The Special Issue covers all aspects related to the development of mechanical metamaterials, including novel designs, application, manufacturing methods, new materials, numerical modelling, experimental testing, and performance characterisation.













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Message from the Editor-in-Chief

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