

Special Issue

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

Message from the Guest Editors

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.

Guest Editors

Dr. Ahmad Baroutaji

Faculty of Engineering and Physical Science, Aston University, Aston Triangle, Birmingham B4 7ET, UK

Dr. Arun Arjunan

1. Additive Manufacturing of Functional Materials Research Group, Centre for Engineering Innovation and Research, University of Wolverhampton, Telford Innovation Campus, Telford TF2 9NT, UK
2. School of Engineering, University of Wolverhampton, Telford Innovation Campus, Telford TF2 9NT, UK

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MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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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.

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
2. Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

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