

Special Issue

Architected Lattice and Composite Materials: Multiscale Design, Manufacturing, and Applications

Message from the Guest Editor

This Special Issue of *Materials*, entitled “**Architected Lattice and Composite Materials: Multiscale Design, Manufacturing, and Applications**,” seeks to collect recent academic achievements in the design, modeling, manufacturing, and characterization of architected lattice materials and advanced composites. Topics of interest include (but are not limited to) the following:

- Multiscale mechanical and multifunctional properties of architected lattices;
- Additive and hybrid manufacturing of lattices and composites;
- Composite–lattice integration, hierarchically structured materials;
- Topology, shape, multiscale, and multi-objective optimization;
- Multiphysics modeling, simulation, and reduced-order modeling;
- Experimental characterization and validation;
- Lattice-based structural and biomedical applications;
- Thermal, acoustic, energy absorption, crashworthiness, and vibration control systems;
- Data-driven and AI-assisted design of architected materials;
- Lattice composites and metamaterials for transportation (aerospace, automotive, and marine), defense, and biomedical applications.

We hope you will consider contributing your latest research in this exciting and rapidly developing field.

Guest Editor

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Deadline for manuscript submissions

20 August 2026



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/265073

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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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