materials

IMPACT FACTOR 3.4 | Indexed in: PubMed | CITESCORE 5.2

an Open Access Journal by MDPI

Recent Progress of Porous Materials

Guest Editor:

Dr. Kuniharu Ushijima
Department of Mechanical Engineering, Tokyo University of Science, Tokyo 1258585, Japan

Deadline for manuscript submissions:
20 August 2024

Message from the Guest Editor

Dear Colleagues,

Periodic cellular structures, such as honeycomb and lattice structures, have been widely used as lightweight sandwich cores in many kinds of mechanical components. In particular, because of the rapid development of additive manufacturing technology, more precise and more complex three-dimensional lattices with micrometer lengths can be fabricated relatively easily. Such structures are expected to be useful as novel new multi-functional metamaterials that cannot be found in natural materials.

For the past 15 years, we have been conducting research on the mechanical, vibration, sound absorption and heat transfer properties of porous structures through nonlinear numerical simulation and experimental tests. More recently, we have also analyzed the multifunctional properties of porous structures and investigated their high potential in combination with optimized design. In this Special Issue, we would like to present some interesting properties of lattice structures.

materials

IMPACT FACTOR 3.4 | Indexed in: PubMed | CITESCORE 5.2

an Open Access Journal by MDPI

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

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.
Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
𝕏@Materials_Mdpi