



an Open Access Journal by MDPI

Preparation and Application of Regularly Structured Porous Materials

Guest Editor:

Prof. Dr. Katarina Monkova

Faculty of Manufacturing
Technologies, Technical
University in Kosice, Kosice,
Slovakia

Deadline for manuscript
submissions:

20 November 2024

Message from the Guest Editor

Rapid developments in the field of materials and production technologies have made it possible to produce new types of sophisticated components that are significantly lighter than traditional products filled with material in the entire volume. This is due to materials that are characterized by a periodic or stochastic arrangement of open or closed pores with different characteristics of their topology, whether they are two-dimensional configurations of structures (e.g., honeycomb), three-dimensional polyhedral arrangements (e.g., lattice structures), or three-dimensional periodic complex shapes (e.g., minimum areas). These specific materials can provide a product with an extraordinary combination of mechanical, physical, or chemical properties compared to full-volume materials.

Potential topics include, but are not limited to:

- Recent innovation in materials with a regular distribution of pores (cellular materials/mesoporous materials/metamaterials/lightweight materials);
- Mechanical/chemical/physical properties;
- Testing, analysis, simulation, and behavior;
- Production and processing;
- Application.





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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

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

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)