

Special Issue

Thermal Metamaterials and Thermal Functional Devices

Message from the Guest Editors

The purpose of this Special Issue is to highlight recent advances in thermal metamaterials and metadevices with dramatically engineered thermal properties and functionalities. Examples include heat flow manipulation, thermal management, engineered thermal emission, symmetry and topological properties in heat transfer systems, enhanced phonon transport in low-dimensional systems or across heterointerfaces, emerging macro/microscale thermal functionalities, practical applications of thermal metamaterials, etc. This Special Issue covers all aspects of thermal metamaterials and thermal functional devices, with an emphasis on understanding the role of ordered functional units, basic physics that determine metamaterials' functionality, novel design tools and manufacturing methods, numerical modelling, and experimental methods.

Guest Editors

Dr. Run Hu

School of Energy and Power Engineering, Huazhong University of Science and Technology, Wuhan 430074, China

Prof. Dr. Ying Li

College of Information Science and Electronic Engineering, Zhejiang University, Hangzhou 310027, China

Deadline for manuscript submissions

closed (20 October 2022)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/87692

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
materials@mdpi.com

[mdpi.com/journal/
materials](https://mdpi.com/journal/materials)





Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



[mdpi.com/journal/
materials](https://mdpi.com/journal/materials)



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.

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

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