

Special Issue

Conventional and Microwave Sintering Techniques in Materials

Message from the Guest Editor

This Special Issue of *Materials* is focused on the sintering of materials involving conventional and microwave heating methods. In the last couple of decades, microwave heating has emerged as a well-recognized method for the sintering of a variety of materials, including ceramics, composites, metals, semiconductors, and advanced ceramics. The theories to explain the sintering mechanism(s) during microwave heating are still under discussion and have not been fully explained. Papers involving comparisons between conventional and microwave methods are welcome. Microwave heating takes place as a result of the interaction of an electromagnetic field with matter through various inherent properties of the material under study. Microwave sintering of metallic materials is a rather new area of research. Papers involving these aspects are most welcome. The spark plasma sintering method and other methods involving electromagnetic fields are also rapid sintering methods of specific materials. Papers based on these methods are also welcome for this Special Issue.

Guest Editor

Prof. Dr. Dinesh Agrawal
Engineering Science and Mechanics, Pennsylvania State University,
University Park, TX, USA

Deadline for manuscript submissions

closed (30 September 2019)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/17093

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 Editorial Board

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.

Editors-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

Prof. Dr. Yuguang Ma

State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou 510640, China

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)