

Special Issue

Processing and Characterization of Ceramic Materials Using Microwave Techniques

Message from the Guest Editor

Ceramic materials are ubiquitous in our daily lives. Nonetheless, their applications are steadily increasing owing to their unique physical and chemical properties. Strategic sectors, such as energy, defense, health, communications, and aerospace, are benefiting from these materials, and often push their limits. On the other hand, high-end applications frequently correspond to high production costs, which limit the application of the most advanced ceramic materials in niche markets. Due to their rapid, specific, and selective heating, microwaves promise to reduce production costs. The scientific and technical relevance of microwave-assisted processes is confirmed by the hundreds of publications that have appeared in recent years in the relevant literature. To provide an overview of the state-of-the-art and emerging trends in the processing and characterization of ceramic materials using microwaves, we invite you to contribute to this Special Issue with your most recent research, including results, methodologies, or applications. Thanks to this Special Issue, your work may serve as inspiration to the many experts working in this exciting field!

Guest Editor

Dr. Giuseppe Annino

Istituto per i Processi Chimico Fisici, Consiglio Nazionale delle Ricerche, Via G. Moruzzi 1, 56124 Pisa, Italy

Deadline for manuscript submissions

closed (20 February 2025)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/180981

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)