Special Issue

High Pressure Synthesis in Materials Science

Message from the Guest Editor

High pressure (HP) is an integral part of various domains of science. The combination of temperature with pressure results in applications in several already existing fields, to sinter/consolidate/densify for obtaining solid material. Innovative HP processes were designed for the high pressure syntheses. Recently, innovative high pressure processes have emerged by the combination of different technologies opening new possibility for obtaining these advanced functional inorganic materials such as: high pressure & spark plasma sintering, cold isostatic pressure & minus temperature, hydrothermal synthesis & sintering. The upcoming Special Issue, entitled “High Pressure Synthesis in Materials Science” aims to cover an overview of the innovation in high pressure processes/technologies for the synthesis of advanced functional inorganic materials. To this end, it is my pleasure to invite you to submit a manuscript for this Special Issue. Full papers, communications, and reviews are welcome. **Keywords**

- sintering
- densification
- consolidation
- crystallization
- polymorphism
- innovative high pressure processes

Guest Editor

Dr. Alain Largeteau

Department of High Pressure, CNRS, Université de Bordeaux, ICMCB, UMR 5026, F-33600 Pessac, France

Deadline for manuscript submissions

closed (31 March 2021)

Materials

an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed

mdpi.com/si/45504

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

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

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)