

## Special Issue

# Spark Plasma Sintered Materials with Advanced Properties

### Message from the Guest Editors

One of the approaches that allows obtaining a wide range of materials—metals, alloys, ceramics, and composites—is powder metallurgy (PM). Its advantage is the possibility of obtaining products that are difficult or impossible to obtain using other technological methods; for example, composites from completely immiscible metals such as Cu/Cr and W/Cu, hard alloys, and ultra-high temperature ceramics. An important stage of the PM technological process is sintering, which gives a material its final strength. An important issue at this stage is the possibility to control the structure of any produced material and, consequently, its properties. We cordially invite you to submit your contribution to this issue, for which the topics of interest include but are not limited to the following:

- Structure and properties of materials after SPS;
- Materials with advanced mechanical, thermal, and conductive properties obtained by SPS;
- Comparative studies of materials obtained by various SPS methods: conventional, reactive, flash.
- Spark plasma sintering kinetics

### Guest Editors

Dr. Kuskov V. Kirill

Center of Functional Nanoceramics, National University of Science and Technology MISiS, 119049 Moscow, Russia

Dr. Nepapushev Andrey

Center of Functional Nanoceramics, National University of Science and Technology MISiS, 119049 Moscow, Russia

### Deadline for manuscript submissions

closed (20 July 2023)



## Materials

an Open Access Journal  
by MDPI

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/121587](https://mdpi.com/si/121587)

*Materials*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[materials@mdpi.com](mailto: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)