materials

an Open Access Journal by MDPI

IMPACT FACTOR 3.1

Indexed in: PubMed

CITESCORE 5.8

Novel Materials Synthesis by Mechanical Alloying/Milling (Volume II)

Guest Editors:

Prof. Dr. Joan-Josep Suñol
Department of Physics, Campus Montilivi s/n, University of Girona, 17003 Girona, Spain

Prof. Dr. Lluïsa Escoda
Department of Physics, University of Girona, 17003 Girona, Spain

Deadline for manuscript submissions:
closed (20 May 2022)

Message from the Guest Editors

It is the second Special Issue of this topic. In this Special Issue, the main objectives are to present new scientific and technological issues linked to: a) synthesis and processing in solid-state science and technology; high-energy milling, severe plastic deformation of materials (SPD), and reaction milling, b) new materials: composites, high entropy alloys, and materials for energy, c) structural and functional characterization: microstructure, mechanical properties, thermal stability, and magnetic response, d) new equipment and procedures: milling equipment based on improved milling efficiency, and e) simulation and models of the milling process.

Mechanical alloying/milling (MA/MM) is a versatile process for the production of powders. The size and size distribution of the particles change as a result of continuous fracture and welding. It has been applied to the production of advanced materials such as oxide dispersion-strengthened, amorphous, nanocrystalline, extended solid solutions, metastable phases, new ceramic, metallic, composite materials, pharmaceutical products, and mechanochemical reaction materials.

materials

IMPACT FACTOR 3.1 | Indexed in: PubMed | CITESCORE 5.8

an Open Access Journal by MDPI

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

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.

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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
𝕏@Materials_Mdpi