



materials



an Open Access Journal by MDPI

Mechanical Characterization of Gypsum Composites

Guest Editors:

Prof. Dr. Mercedes del Río Merino

TEMA Research group, Building School, Architectural constructions and their Management Department. Universidad Politécnica. Avenida Juan de Herrera 6. 28040 Madrid. Spain.

mercedes.delrio@upm.es

Dr. Paola Villoria-Sáez

Building Technology and Environment Research Group, School of Building Construction, Polytechnic University of Madrid, 28040 Madrid, Spain

paola.villoria@upm.es

Deadline for manuscript submissions:

closed (1 July 2021)

Message from the Guest Editors

Gypsum is a traditional material used as a building material, throughout the world, due to its great properties, such as good hydrothermal behavior and resistance to fire. Although gypsum has been used in construction since the Neolithic era, it was not until the end of the 20th century that researches started to work with gypsum composites as materials capable of responding to new needs in buildings. These "second generation" of plasters are produced by making additions to the gypsum, such additions include fibers, to reduce the fragility of the material, or chemical additives, to be able to apply the plaster with mechanical devices (tools). This third generation of gypsums is lighter and has better thermal performance, by incorporating cellular solids into their matrix or gypsums designed with circular economy criteria, using the gypsum matrix as a digester of waste from industry or agriculture. In addition, regenerative construction is currently enabling the development of new gypsum compounds, which aim to improve the health and well-being of building users.



mdpi.com/si/46263

Special Issue



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

James McGill Professor,
Professor of Biomedical
Engineering, Professor of
Bioengineering, Professor of
Experimental Surgery,
Department of Biomedical
Engineering, Faculty of
Medicine/Faculty of Dentistry,
Duff Medical Science Building,
3775 University Street, Montreal,
QC H3A 2B4, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty comprehensive topics: biomaterials, energy materials, advanced composites, structure analysis and characterization, porous materials, manufacturing processes and systems, advanced nanomaterials, smart materials, thin films and interfaces, catalytic materials and carbon materials, materials chemistry, materials physics, optics and photonics, corrosion and materials degradation, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics, metals and alloys, general. The distinguished and dedicated editorial board and our strict peer-review process ensure the highest degree of scientific rigor and review of all published articles. *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 Compindex](#), [CaPlus / SciFinder](#), [Inspec](#), [Astrophysics Data System](#), and many other databases.

Journal Rank: [JCR - Q1](#) (*Metallurgy & Metallurgical Engineering*) / [CiteScore - Q2](#) (*Condensed Matter Physics*)

Contact Us

Materials
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
Fax: +41 61 302 89 18
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[@Materials_Mdpi](https://twitter.com/Materials_Mdpi)