Special Issue

Catalysis and Materials for Biomass Transformation

Message from the Guest Editor

For some years now, society has been aware of the environmental impact generated by the use of fossil resources to obtain energy and products for the chemical industry. Thus, the search for alternative sources has been ongoing, encouraging the mitigation and even elimination of our current dependence on nonrenewable sources. In this context, biomass-derived products based on organic polyfunctional molecules have been employed as substitutes for fine products traditionally synthetized by the petrochemical industry. The efficient development of materials, processes and technologies using this resource as a raw material is vital to solving today's ecological and energy problems. This Special Issue on "Catalysis and Materials for Biomass Transformation" will cover promising recent research and novel trends in the field of materials for catalytic reactions applied to: biomass and waste valorization processes, chemicals and hydrogen (or syngas) from different types of biomasses and wastes (e.g., plastics and waste tyres), catalytic pyrolysis and new materials obtained from biomass transformation.

Guest Editor

Prof. Dr. Francisco Pompeo

- Departamento de Ingeniería Química, Facultad de Ingeniería, Universidad Nacional de La Plata (UNLP), Calle 1 esq. 47, La Plata 1900, Argentina
- 2. Argentine National Research Council (CONICET), Calle 47, 257, La Plata 1900, Argentina

Deadline for manuscript submissions

closed (20 August 2024)



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/135867

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

mdpi.com/journal/ materials





an Open Access Journal by MDPI

Impact Factor 3.2 CiteScore 6.4 Indexed in PubMed





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

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
 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)