

## Special Issue

# Recent Advances and Applications of Biofuel

### Message from the Guest Editor

This Special Issue aims to collect studies that provide recent advances and applications of biofuels, providing different technical solutions to make possible the smooth transition from the current state to a new circumstance in which diesel engines will work by employing solely renewable biofuels. Thus, in addition to conventional biodiesel obtained by catalytic or enzymatic transesterification of triglycerides, all the studies providing effective solutions to allow the use of fats and oils as biofuels in diesel engines, without having to perform any modification in them, will be welcomed. Moreover, this Special Issue is aimed also at collecting those studies related but that are not limited to the production and engineering development of alternative high-quality biofuels from vegetable oils, obtained by hydrotreating triglycerides (greendiesel), the production of novel biofuels that integrate glycerol in their composition and the development of diesel and biodiesel additives. These biofuels seek to achieve 100% atom efficiency because neither glycerol nor any byproduct is obtained. Thus, the overall production process of the biofuel is in large extension simplified.

### Guest Editor

Dr. Rafael Estevez

Departamento de Química Orgánica, Instituto Universitario de Investigación en Química Fina y Nanoquímica (IUNAN), Universidad de Córdoba, Campus de Rabanales, Edificio Marie Curie, E-14071 Córdoba, Spain

### Deadline for manuscript submissions

closed (20 December 2022)



## Materials

---

an Open Access Journal  
by MDPI

---

Impact Factor 3.2  
CiteScore 6.4  
Indexed in PubMed



[mdpi.com/si/107371](https://mdpi.com/si/107371)

*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)