



Advances in Photocatalysis: Photocatalytic Materials and Applications

Guest Editor:

Dr. Beatriz Trindade Barrocas

Centro de Química Estrutural,
Institute of Molecular Sciences,
Faculdade de Ciências,
Universidade de Lisboa, Campo
Grande, 1749-016 Lisboa,
Portugal

Deadline for manuscript
submissions:

closed (10 September 2023)

Message from the Guest Editor

Dear Colleagues,

Photocatalysis represents an important class of chemical transformation that uses the energy provided by light to drive reactions that are difficult to carry out in the dark. Photocatalysis is defined as a change in the rate of a photochemical reaction by the activation of a semiconductor photocatalyst with sunlight or artificial light (ultraviolet or visible radiation). This is an advanced technique with several applications, such as solar energy conversion, photo-sensible sensors, wastewater and air treatment, organic and inorganic synthesis, surface science and storage devices, etc.

In this context, this Special Issue will cover various topics, such as:

- Synthesis and characterization of novel photocatalysts.
- Applications of photocatalysts in different areas:
 - wastewater and air treatment
 - energy conversion
 - drug delivery
 - others
- Photocatalytic materials to address specific sustainability challenges.
- Photocatalytic synthesis of organic and inorganic compounds.
- Critical review and perspectives on photocatalyst applications.





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

Contact Us

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

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

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