# Special Issue

# Advanced Photocatalytic Material: Synthesis, Characterization and Application

## Message from the Guest Editor

Recognizing carbon dioxide emissions from energy consumption are threatening ecological civilization, energy transformation is an important measure that must be implemented to achieve global carbon neutrality. The development of photocatalytic materials and the application of photocatalytic technology are important frontier research aspects in this field. Over the past 50 years, various photocatalytic materials have emerged, which have laid a foundation for basic scientific research and practical applications.

This Special Issue focuses on photocatalytic materials, not limited to the development of new photocatalytic materials, the study of the structure–activity relationships of materials, the implementation of in situ monitoring using advanced characterization technology in the preparation process, and the expansion of the application fields of these materials. Now, photocatalytic technology is not only being applied to energy and the environment, but also to the field of biomedicine. Warm welcome colleagues worldwide who are committed to the field of photocatalysis to publish papers here and exchange their latest research results with colleagues.


**Guest Editor**

Dr. Minmin Xu

College of Chemistry, Chemistry Engineering and Materials Science, Soochow University, Suzhou 215123, China


**Deadline for manuscript submissions**

closed (10 February 2024)


**Materials**

**an Open Access Journal by MDPI**

**Impact Factor 3.2**
**CiteScore 6.4**
**Indexed in PubMed**

mdpi.com/si/123372

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

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

MDPI

# 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)