

Special Issue

Recent Advances in Photosynthetic Materials

Message from the Guest Editors

The conversion of light into chemical energy is one of the most important phenomena for both basic science and for practical application. Photosynthetic systems are structured at every level of biological organization (from simple photosensitive molecules and (macro) molecular complexes through to membranes and cells up to individuals and supra-individual systems) for extremely efficient and specific functions, and can be used in smart bio-technology by combining them with new generation of advanced materials. Based on the unique properties of photosynthetic systems, a new generation of applications (components of integrated optoelectronic devices for photo and biosensors, fast optical switches and logic gates in circuits, etc.) are also under exploration in bio-technology research. The aim of the Special Issue is to provide a platform for and accept manuscripts comprising original results, reviews, and theoretical considerations in the field of light-matter interaction in living systems at any level of photosynthetic organization, as well as in artificial and biomimetic materials.

Guest Editors

Dr. László Nagy

Department of Medical Physics and Informatics, Faculty of Science and Informatics, Albert Szent-Györgyi Medical School, University of Szeged, 6720 Szeged, Hungary

Dr. Petar H. Lambrev

Biological Research Centre, 6726 Szeged, Hungary

Deadline for manuscript submissions

closed (20 February 2022)



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/49482

Materials
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
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)