Special Issue

Advanced Functional Materials for Optoelectronic and Sensing Applications

Message from the Guest Editor

Currently, it is hard to imagine a convenient life without the latest achievements in optoelectronic technologies. At the same time, using increasingly ecological and environmentally friendly methods of synthesizing (manufacturing) the components used in these (and others) technologies has become necessary. This results in a constant need to search for more efficient devices with longer working times, based on cheaper and greener production processes. Typically, solid organic compounds emit a much weaker light than in solutions. Therefore, a practical goal is to obtain solid compounds showing enhanced light emission, i.e., "aggregation-induced emission" (AIE). It should also be emphasized that, apart from applications in organic electronics, AIE luminogens are currently used as bioand chemosensors, as well as for information storage and bioimaging (to name a few examples). This Special Issue aims to present advances in AIE theory, mechanisms, and applications, alongside the synthesis and examination of AIE luminogens themselves. Both experimental and theoretical contributions are welcome, in the form of research articles, short communications, perspectives, and reviews.

Guest Editor

Dr. Michał Filapek

Institute of Chemistry, University of Silesia, Szkolna 9, 40-006 Katowice, Poland

Deadline for manuscript submissions

20 January 2026



an Open Access Journal by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/217448

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)