



materials



an Open Access Journal by MDPI

Luminescent Nanomaterials for Imaging and Sensing

Guest Editor:

Prof. Dr. Dirk Poelman

Lumilab, Department of Solid
State Sciences, Ghent University,
Krijgslaan 281-S1, B-9000 Gent,
Belgium

Deadline for manuscript
submissions:

10 September 2024

Message from the Guest Editor

Dear Colleagues,

Traditionally, luminescent materials have mainly been developed for lighting applications, first for (compact) fluorescent lamps and more recently for LED lighting. However, there is a wealth of other current and potential future applications of luminescent compounds, mainly for imaging and sensing applications. For these applications, nanophosphors are most often required, for example, as nanothermometers or biocompatible near-infrared emitters for bio-imaging. Given the possibility to tune emission spectra, luminescent intensities, trap properties and dopant oxidation states as a function of external parameters like temperature, pressure, irradiation or illumination, phosphors are ideally suited for sensing on the nanoscale or for high-resolution imaging. Persistent phosphors that emit visible or near-infrared light can also substantially contribute to sensing, safety applications, and self-powered lighting solutions. We invite submissions for this Special Issue both in the form of fundamental and application-driven original research papers, as well as comprehensive review articles.

Prof. Dr. Dirk Poelman

Guest Editor



mdpi.com/si/184314

Special Issue



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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
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)