

Special Issue

Advanced Rare Earth Doped Functional Materials

Message from the Guest Editors

RE ions play a fundamental role in various optical applications and advanced technologies, including lasers, optics, solar-energy conversion, displays and economical lighting, medical imaging, and quantum computing as well as rechargeable hybrid batteries, electronics, alloys, and magnets just to cite its few applications. Materials doped with RE elements have become vital due to their unique physiochemical properties, such as their distinct optical, magnetic, and electronic behaviors, enabling significant performance enhancements in these diverse fields. This Special Issue highlights recent advances in Novel active devices and emerging applications of RE-doped optical materials. It focuses on innovative functional materials, particularly organic, crystalline, glass, and glass ceramics. Topics of interest include the latest research and advancement in luminescent materials, preparation and characterization methods, new processing methods for fabricating RE-doped glasses and glass ceramics, and advances in glass fibers and films. Toward this end, it is our pleasure to invite you to submit your manuscript to this Special Issue.

Guest Editors

Dr. Khaldoon Nasser

Photonics Laboratory, Tampere University, Tampere, Finland

Prof. Dr. Laetitia Petit

Photonics Laboratory, Tampere University, Korkeakoulunkatu 3, 33720 Tampere, Finland

Dr. Nirajan Ojha

Photonics Laboratory, Tampere University, Tampere, Finland

Deadline for manuscript submissions

20 February 2026



Materials

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 6.4
Indexed in PubMed



mdpi.com/si/231558

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)