



materials



an Open Access Journal by MDPI

Advanced Magneto-Optical and Luminescence Materials

Guest Editor:

Dr. Andrzej Kruk

Institute of Technology,
University of the National
Education Commission, ul.
Podchorążych 2, 30-084 Kraków,
Poland

Deadline for manuscript
submissions:

closed (31 January 2022)

Message from the Guest Editor

Magneto-optical and luminescence properties have become important for the development of a new class of functional materials. This effect causes the rotation of polarization by a material as the result of the application of an external magnetic field. The Faraday effect has received significant attention with regard to applications of magneto-optical materials. The degree of Kerr rotation is used to determine the magnitude and orientation of the local magnetic domain. Dispersive MO effects in pure and substituted rare-earth ions garnets or sinters are the subject of numerous experimental and theoretical investigations. These effects are used for modulating the amplitude of light and form the basis of optical circulators and optical isolators and are integral to optical telecommunications networks and various laser applications. This Special Issue focuses mainly on the detection and characterization of magneto-optical, luminescence,



mdpi.com/si/69535

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)