



an Open Access Journal by MDPI

Spectroscopic Methods for Applied Sciences and Study of Materials

Guest Editor:

**Prof. Dr. Carlo Maria
Carbonaro**

Department of Physics, University
of Cagliari, 09124 Cagliari, Italy

Deadline for manuscript
submissions:

closed (31 December 2020)

Message from the Guest Editor

It is with great pleasure that I present this Special Issue of the journal *Materials*, which aims to illustrate how spectroscopy methods can make a significant difference in the study of materials. The methods include, but are not limited to, optical absorption and emission spectroscopy (both stationary and time resolved), Auger electron spectroscopy, X-ray photoelectron spectroscopy, Raman and FTIR vibrational spectroscopy, nuclear magnetic resonance spectroscopy, energy loss, and cathodoluminescence spectroscopies up to theoretical spectroscopy, based on first principle density functional theory computations.

The goal of this issue is to bring the expertise and competences in different fields of science together—spanning from photonics to analytical chemistry, from cultural heritage to environment, from electronic and thermal transport to biology and biomedicine—to give readers an overview of the hot topics and the state of the art regarding the application of spectroscopy techniques to materials science.

Keywords

- spectroscopy
- materials science



mdpi.com/si/38930



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)