



materials



an Open Access Journal by MDPI

Materials Preparation, Characterization and Applications in Raman Spectroscopy

Guest Editor:

Dr. Yahao Wang

College of Chemistry and Life
Sciences, Zhejiang Normal
University, Jinhua, China

Deadline for manuscript
submissions:

closed (20 August 2023)

Message from the Guest Editor

Raman spectroscopy is a non-destructive chemical analysis technique, which could provide detailed information about the chemical composition, structure, polymorphy, crystallinity and molecular interactions of a sample, whether solid, liquid, gas, gel, slurry or powder. Thus, it has been broadly used in optics, biomedicine, environmental science, materials, catalysis, energy, and so forth. Whether the goal is to collect qualitative or quantitative data, Raman analysis can provide key information quickly and easily.

In addition, surface-enhanced Raman scattering/spectroscopy (SERS) has attracted increasing interest in recent years, both in terms of its fundamental physics/chemistry and applications in many fields. Benefitting from the rapid development of nanomaterials and nanotechnologies, SERS are widely used as a label-free and ultra-high sensitivity detection method in surface analyses, as well as biomolecular and chemical sensing. SERS also play an important role in the in situ characterization of surface catalytic reactions under working conditions, providing important spectral evidence regarding the reaction intermediates produced on catalyst surfaces.



mdpi.com/si/110333

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

Contact Us

Materials Editorial Office
MDPI, St. Alban-Anlage 66
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)