Special Issue

Applications of Raman Spectroscopy for Materials Research

Message from the Guest Editors

This Special Issue will focus on the latest advances in the application of Raman spectroscopy for materials research. Potential topics include, but are not limited to, the following:

- Raman spectroscopy for the structural and vibrational analysis of advanced materials.
- In situ and operando Raman studies of catalysts and energy storage systems.
- Applications of Raman imaging for the characterization of heterogeneous materials.
- Raman spectroscopy in the study of nanostructures, such as quantum dots, nanotubes, and 2D materials.
- Time-resolved and resonance Raman techniques for dynamic material analysis.
- Integration of Raman spectroscopy with other techniques, including AFM and SEM, for correlated characterization.
- Raman-based studies of phase transitions, stress, and strain in materials.
- Environmental and biomedical applications of Raman spectroscopy in materials research.
- Novel approaches for enhancing Raman signals, such as surface-enhanced Raman spectroscopy (SERS) and tip-enhanced Raman spectroscopy (TERS).
- Computational and theoretical studies supporting Raman spectral analysis.

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Deadline for manuscript submissions

20 August 2025



Applied Sciences

an Open Access Journal by MDPI

Impact Factor 2.5 CiteScore 5.5



mdpi.com/si/230014

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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