

Special Issue

Scanning Electron Microscopy and Energy-Dispersive Spectroscopy Analyses in Materials Science

Message from the Guest Editors

Microstructure and chemical composition of metallic and non-metallic materials play a decisive role in materials' properties. Obtaining extraordinary characteristics of materials can be achieved primarily by changing their structure and chemical composition. Each alloy system can be considered a small universe with unique properties and infinite possible modifications of properties from the atomic to the macro scale. Alloying and modifying surface properties can fundamentally change the characteristics of a material. Electron and atomic force microscopy along with chemical composition determinations from the nano to the millimeter scale provide precious information about the actual state of the material and lead to opportunities to improve their properties.

https://www.mdpi.com/journal/applsci/special_issues/materials_spectroscopy_analyses

Guest Editors

Prof. Dr. Nicanor Cimpoesu

Faculty of Materials Science and Engineering, "Gheorghe Asachi" Technical University of Iasi, 700050 Iasi, Romania

Dr. Ramona Cimpoesu

Department of Materials Science, "Gheorghe Asachi" Technical University of Iasi, 700050 Iasi, Romania

Deadline for manuscript submissions

closed (20 December 2025)



Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/si/119816](https://www.mdpi.com/si/119816)

Applied Sciences
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
applsci@mdpi.com

[mdpi.com/journal/applsci](https://www.mdpi.com/journal/applsci)





Applied Sciences

an Open Access Journal
by MDPI

Impact Factor 2.5
CiteScore 5.5



[mdpi.com/journal/
applsci](https://mdpi.com/journal/applsci)



About the Journal

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.

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo
Dipartimento di Fisica, Politecnico di Milano, Piazza L. da Vinci 32,
20133 Milano, Italy

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), Ei Compendex, Inspec, Embase, CAPIus / SciFinder, and other databases.

Journal Rank:

JCR - Q2 (Engineering, Multidisciplinary) / CiteScore - Q1 (General Engineering)