

Special Issue

Characterization of Nanomaterials by Synchrotron Radiation Techniques

Message from the Guest Editor

In recent years, nanomaterials have greatly advanced because of their tremendous potential in many research fields. Synchrotron radiation X-ray characterizations have shown high potential in exploring the causal relationship between the properties and structure of nanomaterials. More specifically, operando synchrotron X-ray measurements could provide useful insight in order to better understand the dynamic process of nanomaterials. Benefiting from the high-brilliance X-ray photons and the broad spectrum of the SR light source, numerous measurement methods were developed to study nanomaterials in various fields, including synchrotron X-ray absorption fine structure spectroscopy (XAFS), synchrotron X-ray diffraction (SXR), synchrotron X-ray photoelectron spectroscopy (SXPS), and so on. This publication aims to present the advanced SR-based technologies applied to nanomaterials, possible directions for their development, and ways of adapting them to practical applications. In this Special Issue, original research articles and reviews are welcome. We look forward to receiving your contributions.

Guest Editor

Prof. Dr. Shuangming Chen

National Synchrotron Radiation Laboratory, CAS Center for Excellence in Nanoscience, University of Science and Technology of China, Hefei 230026, China

Deadline for manuscript submissions

closed (31 July 2023)



Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.4
CiteScore 8.5
Indexed in PubMed



mdpi.com/si/152874

Nanomaterials
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
nanomaterials@mdpi.com

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





Nanomaterials

an Open Access Journal
by MDPI

Impact Factor 4.4
CiteScore 8.5
Indexed in PubMed



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



About the Journal

Message from the Editor-in-Chief

Nanoscience and nanotechnology are exciting fields of research and development, with wide applications to electronic, optical, and magnetic devices, biology, medicine, energy, and defense. At the heart of these fields are the synthesis, characterization, modeling, and applications of new materials with lower nanometer-scale dimensions, which we call “nanomaterials”. These materials can exhibit unusual mesoscopic properties and include nanoparticles, coatings and thin films, metal–organic frameworks, membranes, nano–alloys, quantum dots, self-assemblies, 2D materials such as graphene, and nanotubes. Our journal, *Nanomaterials*, has the goal of publishing the highest quality papers on all aspects of nanomaterial science to an interdisciplinary scientific audience. All of our articles are published with rigorous refereeing and open access.

Editor-in-Chief

Prof. Dr. Shirley Chiang
Department of Physics, University of California Davis, One Shields
Avenue, Davis, CA 95616-5270, USA

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, CAPIus / SciFinder, Inspec, and other databases.

Journal Rank:

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