Special Issue

Nano-Composites for Photo- and Electrocatalysis and Its Application

Message from the Guest Editors

Photo- and electrocatalysis are concerned with redox reactions at the solid-liquid interface. Various emerging photo-electrochemical devices in the energy and environmental field are strongly associated with catalytic half-reactions, such as OER (oxygen evolution reaction), ORR (oxygen reduction reaction), HER (hydrogen evolution reaction), and CO2RR (carbon dioxide reduction reaction), etc. This Special Issue of *Nanomaterials* aims to present original research or reviews highlighting the application of nanocomposites in photo- and electrocatalysis. The design and engineering of heterogeneous nanocomposites are the main focus of this SI, but other topics include: noble-metal-based nanocomposites; transition-metal-based nanocomposites; carbon-based nanocomposites; MOFs-derived nanocomposites; polymer matrix nanocomposites; and magnetic nanocomposites. This Special Issue will highlight the current trends and progress in the field of photo- electrocatalysis.

Guest Editors

Dr. Songlin Zhang

Institute of Materials Research and Engineering (IMRE), Agency for Science, Technology and Research (A*STAR), Singapore, Singapore

Prof. Dr. Zaicheng Sun

Department of Chemistry and Biology, Faculty of Environment and Life, Beijing University of Technology, Beijing 100124, China

Deadline for manuscript submissions

closed (31 August 2023)

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/si/123388

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

mdpi.com/journal/nanomaterials

Nanomaterials

an Open Access Journal by MDPI

Impact Factor 4.3
CiteScore 9.2
Indexed in PubMed

mdpi.com/journal/nanomaterials

MDPI

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. Eugenia Valsami-Jones
School of Geography, Earth and Environmental Science, University of Birmingham, Birmingham B15 2TT, UK

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, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank:

JCR - Q2 (Physics, Applied) / CiteScore - Q1 (General Chemical Engineering)