Special Issue

Metal-Based Nanomaterials in Catalysis and Electrochemistry

Message from the Guest Editor

In the periodic table of elements, metals comprise around 80% of all the elements, and can form various chemical bonds with metallic and non-metallic elements. Thus, metal-based nanomaterials represent a huge family of materials that includes pure metals and metal-based compounds and composites, playing a vital role in a wide range of applications. This Special Issue will focus on the metal-based nanomaterials used for catalytic (such as thermo-, electro-, and photo-electrocatalysis) and electrochemical applications (such as fuel cells, batteries, supercapacitors, and sensors). The physiochemical properties of metal-based nanomaterials can vary a lot depending on the composition, size, morphology, crystal structure, defects, etc. Great progress has been achieved in our understanding of the correlation between material structure, property, and performance, but challenges still remain. This Special Issue aims to uncover the latest advances in this promising area and inspire more fascinating works.

Guest Editor

Prof. Dr. Hongfei Cheng

College of Materials Science and Engineering, Tongji University, Shanghai 201804, China

Deadline for manuscript submissions

closed (31 December 2024)

Molecules

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed

mdpi.com/si/172950

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

mdpi.com/journal/molecules

Molecules

an Open Access Journal by MDPI

Impact Factor 4.6
CiteScore 8.6
Indexed in PubMed

mdpi.com/journal/molecules

MDPI

About the Journal

Message from the Editor-in-Chief

As the premier open access journal dedicated to experimental organic chemistry, and now in its 25th year of publication, the papers published in *Molecules* span from classical synthetic methodology to natural product isolation and characterization, as well as physicochemical studies and the applications of these molecules as pharmaceuticals, catalysts and novel materials. Pushing the boundaries of the discipline, we invite papers on multidisciplinary topics bridging biochemistry, biophysics and materials science, as well as timely reviews and topical issues on cutting edge fields in all these areas.

Editor-in-Chief

Prof. Dr. Thomas J. Schmidt
Institute of Pharmaceutical Biology and Phytochemistry, University of Münster, Corrensstrasse 48, D-48149 Münster, Germany

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, MEDLINE, PMC, Reaxys, CaPlus / SciFinder, MarinLit, AGRIS, and other databases.

Journal Rank:

JCR - Q2 (Biochemistry and Molecular Biology) / CiteScore - Q1 (Organic Chemistry)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 16.1 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the first half of 2025).