Special Issue

Computational Chemistry Approach for Materials Design

Message from the Guest Editors

Due to the intricate structures of different materials and limited in situ characterization techniques, the traditional approaches for materials design often rely on trial-and-error testing, which is laborious and inefficient. Currently, computational modelling offers a more rational way to accelerate this process. Understanding the design rules that govern materials chemistry and architecture holds the key towards rationally optimizing technologies such as batteries, fuel cells, electrolysers, and so on. This Special Issue, "Computational Chemistry Approach for Materials Design", aims to become a useful platform to report and summarize the progress achieved in this field.

Guest Editors

Dr. Tianwei He

International Joint Research Center for Advanced Energy Materials of Yunnan Province, Yunnan Key Laboratory of Carbon Neutrality and Green Low-Carbon Technologies, School of Materials and Energy, Yunnan University, Kunming 650091, China

Dr. Lei Zhang

School of Chemistry and Chemical Engineering, Shandong University, Jinan 250100, China

Deadline for manuscript submissions

31 December 2025



Molecules

an Open Access Journal by MDPI

Impact Factor 4.6 CiteScore 8.6 Indexed in PubMed



mdpi.com/si/212171

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



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).

