

Special Issue

Properties and Applications of Metal-Organic Frameworks

Message from the Guest Editor

Recently, metal–organic frameworks (MOFs), a class of crystalline nonporous materials composed of inorganic metal nodes and organic ligands. Molecular insight into the correlation between the structure–property and performance of MOFs has attracted increasing research interest. This Special Issue aims to cover a broad range of subjects, from the molecular simulation of MOFs and the study of their fundamental properties to the application of MOFs, such as hydrogen storage, carbon capture, adsorption heat pumps, and heat transformation. We invite authors to contribute original research articles covering the new development in the molecular understanding of MOFs physicochemical properties, including adsorption and separation performance, heat capacity, and heat conductivity; the synthesis, characterization, and application of novel MOFs; and utilization of MOFs for emerging technology, including drug delivery, etc. High-throughput computational screening and machine learning of MOFs are particularly welcome.

Guest Editor

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Message from the Editor-in-Chief

The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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