

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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