

Special Issue

Advancements in Metal-Organic Frameworks: Synthesis, Properties, and Applications

Message from the Guest Editor

Metal-organic frameworks (MOFs) have gained exceptional attention from the scientific community because of their highly ordered crystalline properties, tunable pores, incredibly large surface area, and specific functionalities. In the last 30 years, MOFs have established their position as one of the hottest topics in the fields of material science and chemistry. At the same time, MOFs' synthesis approaches, node and ligand adjustments, and different secondary building units' utilization have enhanced MOFs' structural characterizations. The hybrid nature of MOFs provides an almost infinite set of building blocks that can be manipulated to target specific application as either sensors, environmental materials, catalysts, biomedical materials, and/or many others. Their adjustable architectures and functionalized pores are the most notable features, which can be attained using functional groups with certain ligands and metal ions. MOFs provide ample space for guest species while remaining stable. Consequently, the necessity of platforms where scientist can present and discuss their latest research in the field of metal-organic frameworks is evident.

Guest Editor

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