

Special Issue

Developments in Metal-Organic Frameworks and Their Composites: Synthesis, Characterization and Applications

Message from the Guest Editor

Metal-organic frameworks (MOFs) are a unique porous material with promising environmental applications, which qualified them to win the Nobel Prize in 2025. However, MOFs still face many challenges that require urgent solutions, including scalability, high cost, lack of stability, sustainability, economic and environmental policies, etc. In order to contribute to addressing these challenges, this Special Issue has been launched. Through this issue, we can highlight multidisciplinary collaboration in chemical sciences, engineering materials, composites, energy, and modelling of new MOFs and their composites, and provide a platform that can promote the latest innovations, enabling the production of cheaper, more stable, eco-friendly, and sustainable frame composites without compromising the structural integrity or performance of MOFs.

Guest Editor

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Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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