Special Issue

Synthesis and Application of Metal-Organic Framework Materials

Message from the Guest Editor

In the last two decades, tremendous efforts have been made to design new MOFs with wide applications and commercialization. Special attention has been offered to designing MOFs with different crystal structures, morphology, composition, and porosity. This Special Issue describes recent achievements in the design and application of MOFs.

Thus, this issue will address:

(i) Well-established and facile methods for the synthesis of MOFs; (ii) The structural diversity of MOFs achieved by ligand design and synthesis; (iii) The synthesis of hybrid MOF-based materials; (iv) State-of-the-art characterization methods to understand the properties of MOFs; (v) The application of MOFs in gas storage, separation, release, etc.; (vi) The use of MOFs in catalysis; (vii) The relevance of MOFs in the field of biosensors, nanozymes, and drug delivery; (viii) The use of MOFs for electrochemical and photochemical/photocatalytic energy conversion; (ix) MOFs as energy storage materials.

We invite you to submit a manuscript (full paper,

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communication, or review) for this Special Issue.

Deadline for manuscript submissions

closed (20 May 2023)



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About the Journal

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.

Editor-in-Chief

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