



an Open Access Journal by MDPI

Advanced Metal-Organic Frameworks-Based Materials: Photocatalytic Properties and Their Applications

Guest Editor:

Prof. Dr. Xiubing Huang

Department of Materials Physics and Chemistry, School of Materials Science and Engineering, University of Science and Technology Beijing, Beijing 100083, China

Deadline for manuscript submissions: closed (10 June 2023)



Dear Colleagues,

Metal-organic frameworks (MOF), as a class of newly emerged crystalline coordination network built from metal ions and organic bridging ligands, possess abundant unique properties, such as tunable structures, tailorable functionalities, high porosity, large surface areas, intriguing framework architectures, and high chemical/mechanical stability. MOF-based materials have been widely investigated and applied in catalysis, energy storage and conversion, and gas storage and separation. In recent years, MOF-based materials have become a powerful platform to construct efficient photocatalyst systems with diverse and even incompatible functionalities because of their unique excitation and charge transition mechanisms.

This Special Issue intends to present some of the most relevant progress on the design and development of MOFbased materials and their photocatalytic applications. The Special Issue will significantly benefit from the contribution of original research articles and critical review articles in this scientific field.

Prof. Dr. Xiubing Huang *Guest Editor*





mdpi.com/si/103769





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

 Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada
Faculty of Dentistry and Oral Health Sciences, McGill University, 3640 Rue University, Montreal, QC H3A 0C7, Canada

Message from the Editor-in-Chief

Materials (ISSN 1996-1944) was launched in 2008. The iournal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites. advanced materials characterization, porous materials, manufacturing processes and svstems. 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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), PubMed, PMC, Ei Compendex, CaPlus / SciFinder, Inspec, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Metallurgy & Metallurgical Engineering*) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/materials materials@mdpi.com X@Materials_Mdpi