



materials



an Open Access Journal by MDPI

Covalent Organic Frameworks Based Smart Materials

Guest Editor:

Prof. Dr. Ma Dongge

Department of Chemistry,
College of Chemistry and
Materials Engineering, Beijing
Technology and Business
University, Fangshan District,
Beijing 102401, China

Deadline for manuscript
submissions:
closed (20 August 2023)

Message from the Guest Editor

Dear Colleagues,

Recent years have witnessed fascinating developments in the field of crystalline covalent organic frameworks (COFs) materials. Because of their excellent porosity, crystallinity, stability and structural tunability, COFs materials are widely applied for multiple aims, such as adsorption, separation, catalysis, energy storage, optoelectronics and sensors.

This Special Issue should concentrate on these challenges. It provides an opportunity to focus on the novel design, synthesis and application of COFs-based smart materials for responding to different types of external signals, which will not only boost further scientific progress in this field, but also provide mechanistic insights and viewpoints.

I cordially invite you to submit your contributions to this issue, whose topics include, but are not limited to, the following:

- Fluorescent COFs responding to metal cations and anions;
- Humidity-sensing COFs;
- COFs capable of sensing changes in pH;
- COFs materials for responding to other types of external stimuli;
- Structure–function relationship demonstration of COFs-based stimuli-responding materials.



mdpi.com/si/1111151

Prof. Dr. Dongge Ma
Guest Editor

Special *Issue*



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Maryam Tabrizian

1. Department of Biomedical Engineering, Faculty of Medicine and Health Sciences, McGill University, Montreal, QC H3A 2B6, Canada

2. 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 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.

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 - Q1 (Metallurgy and Metallurgical Engineering) / CiteScore - Q2 (*Condensed Matter Physics*)

Contact Us

Materials Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/materials
materials@mdpi.com
[X@Materials_Mdpi](https://twitter.com/Materials_Mdpi)