

## Special Issue

# Molecular Scale Design, Synthesis, and Application of Macroporous, Mesoporous, and Microporous Materials

### Message from the Guest Editor

Macro-, meso- and microporous membranes are widely used for separation and catalysis in the fields of food processing, biotechnology, pharmaceuticals, petrochemicals, and many more besides. In addition, they are also employed in production and energy storage. They can be tailored to provide different types of architecture, which requires the use of novel designs and specific synthesis methods. The optimal membrane microstructure consists of desirable pore sizes, a sharp pore size distribution, good pore interconnectivity and porosity, large surface areas, and an absence of defects. Furthermore, the design of three-dimensional materials with multiscale pore architecture represents an ongoing challenge. This Special Issue welcomes original research papers and reviews on the design, preparation and application of macro-, meso- and microporous materials. This Special Issue focuses on researching these porous materials at the molecular level, with a specific focus on mechanistic studies.

### Guest Editor

Dr. María Teresa Colomer

Instituto de Cerámica y Vidrio, Consejo Superior de Investigaciones Científicas, C/Kelsen 5, 28049 Madrid, Spain

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Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[ijms@mdpi.com](mailto:ijms@mdpi.com)

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The International Journal of Molecular Sciences (*IJMS*, ISSN 1422-0067) is an open access journal, which was established in 2000. The journal aims to provide a forum for scholarly research on a range of topics, including biochemistry, molecular and cell biology, molecular biophysics, molecular medicine, and all aspects of molecular research in chemistry. *IJMS* publishes both original research and review articles, and regularly publishes special issues to highlight advances at the cutting edge of research. We invite you to read recent articles published in *IJMS* and consider publishing your next paper with us.

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### Editor-in-Chief

Prof. Dr. Maurizio Battino

Department of Odontostomatologic and Specialized Clinical Sciences,  
Sez-Biochimica, Faculty of Medicine, Università Politecnica delle  
Marche, Via Ranieri 65, 60100 Ancona, Italy

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