

## Special Issue

# Recent Advances in Multifunctional Aerogel: Preparation, Modification, Composite Fabrication and Applications

### Message from the Guest Editors

Aerogels represent a revolutionary class of materials with exceptional properties that hold significant promise for advancing sustainability across various domains. It is typically derived from materials such as silica, carbon, or polymers. Recent advances have significantly expanded aerogel applications across various fields due to their unique properties such as high porosity, lightweight nature, low thermal conductivity, and excellent mechanical properties.

Ongoing advancements in material science and engineering are expected to overcome current limitations, paving the way for broader use of aerogels in commercial and industrial applications. The future of aerogels lies in their ability to be customized for specific needs, making them versatile and highly functional materials in cutting-edge technologies.

It is hoped that the topics will stimulate new research and discoveries in the field of preparation, modification, composite fabrication, and applications of multifunctional aerogels. We look forward to the submission of your original research articles, and reviews on this Special Issue.

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### Guest Editors

Dr. Ana B. Paninho  
Dr. Márcia G. Ventura  
Dr. Carmo Lança

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### Deadline for manuscript submissions

closed (31 March 2025)



## Gels

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

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## About the Journal

### Message from the Editorial Board

*Gels* (ISSN 2310-2861) is recently established international, open access journal on physical and chemical gel-based materials. The journal aim is to encourage scientists to publish their experimental and theoretical results in as much detail as possible. General topics include but not limited to synthesis, characterization and applications of new organogels, hydrogels and ionic gels made either from low molecular weight compounds or polymers, composite and hybrid materials where a metal is by some means incorporated into the gel network, and computational studies of these materials in order to provide a better understanding of gelation mechanism. We cordially invite you to consider publishing with us and contribute with your own grain of sand to the advance in this fascinating field.

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### Editors-in-Chief

Prof. Dr. Esmail Jabbari

Biomimetic Materials and Tissue Engineering Laboratory, Department of Chemical Engineering, University of South Carolina, Columbia, SC 29208, USA

Prof. Dr. Chuanliang Feng

State Key Lab of Metal Matrix Composites, School of Materials Science and Engineering, Shanghai Jiao Tong University, Shanghai 200240, China

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