

Special Issue

Modeling and Simulation of Gel-Based Materials

Message from the Guest Editor

Modeling and simulations play a key role in materials science. Recent progress in the research of gel-based materials has been strongly reinforced by modeling and simulation studies. With a growing interest in this subject within the gel community, we welcome submissions related to modeling and simulation of hydrogels, aerogels, and other gel-based materials. Special attention will be given to studies focusing on modeling of their structure–property relations. The properties of interest are thermal, mechanical, acoustic or textural. We encourage submissions describing physically motivated modeling approaches, such as micromechanical ones or molecular dynamics simulations, as well as multiscale models. Also of interest are submissions related to the modeling of the synthesis process of the gels or aerogels. Submissions on fundamental materials research as well as on application-oriented simulation-based research are welcome. Keywords

- aerogels
- hydrogels
- structure–property modeling
- multiscale models
- molecular dynamics simulations
- computational models

Guest Editor

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Gels

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About the Journal

Message from the Editor-in-Chief

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.

Editor-in-Chief

Prof. Dr. Esmail Jabbari

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