

Special Issue

Gel-Based Electrolytes for Solid-State Electrochemical Devices

Message from the Guest Editors

Electrolytes are a key element for the manufacturing of different kinds of electrochemical devices, such as dye-sensitized solar cells, energy-storage devices (supercapacitors, batteries, etc.), electrochromic devices, etc. In this context, there is a growing interest towards the development of large-area, flexible, low-cost, and safe electrochemical devices. For these reasons, research is moving towards full solid-state electrochemical devices based on polymeric electrolytes. Gel-based materials represent an interesting solution for the development of solid-state devices thanks to the perfect combination of chemical and physical properties. Indeed, gels show flexibility, mechanical robustness and no safety issues that could be related to liquid electrolytes. At the same time, thanks to the gel-like structure of this kind of electrolyte, good ionic conductivity at room temperature can be obtained. This Special Issue is intended to cover the latest progress in the field of gel-based electrolytes for electrochemical devices. The Special Issue aims to gain insights into the development of new materials and production techniques as well as their technological applications.

Guest Editors

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Deadline for manuscript submissions

closed (31 July 2023)



Gels

an Open Access Journal
by MDPI

Impact Factor 5.3
CiteScore 7.6
Indexed in PubMed



mdpi.com/si/126714

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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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