Special Issue

Advances in Cellulose-Based Hydrogels (2nd Edition)

Message from the Guest Editors

Cellulose is the most abundant natural biopolymer on Earth. With an estimated annual production of ~1.5 x 1012 tons globally, and the possibility of its extraction even from waste sources, it is considered an almost inexhaustible source of raw material capable to make up for the growing demand for environmentally friendly and biocompatible products. Within this framework, cellulose-based hydrogels usually combine hydrophilicity, biodegradability, non-toxicity, and biocompatibility together with low costs and massive availability, which make them extremely attractive in both academic and industrial fields. Possible application fields include biomedical engineering, progress in smart systems and stimuli-responsive systems, the agricultural sector, and water purification. This Special Issue aims to collect papers presenting the recent progress in cellulose-based hydrogels, including gels prepared from natural cellulose and its derivatives, cellulose graft co-polymers, and composite gels based on cellulose. We encourage submissions covering key aspects of cellulose-based hydrogels. For more information, please visit mdpi.com/si/126856.

Guest Editors

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Dr. Laura Riva

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Deadline for manuscript submissions

closed (20 November 2023)

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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. Esmaiel Jabbari
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manuscripts are peer-reviewed and a first decision is provided to authors approximately 12.5 days after submission; acceptance to publication is undertaken in 2.7 days (median values for papers published in this journal in the first half of 2025).