



gels



an Open Access Journal by MDPI

Hydrogel-Based Sensors for Biomedical Applications

Guest Editor:

Dr. Ruchi Gupta

School of Chemistry, University of
Birmingham, Birmingham B15
2TT, UK

Deadline for manuscript
submissions:

closed (31 October 2021)

Message from the Guest Editor

This Special Issue focuses on the sensing mechanism and performance of hydrogel-based sensors along with their healthcare and biomedical applications. Hydrogels have been utilised in these sensors in the form of stimuli-responsive materials or as scaffolds for hosting recognition elements such as antibodies, aptamers, and enzymes. Such hydrogel-based sensors rely on changes in refractive index, colour, geometry, and electrical conductance to measure a wide variety of analytes, including proteins, DNA, hormones, ions, and carbohydrates. Analytes have been measured in biological fluids, such as blood, saliva, tears, sweat, and urine, to enable disease diagnosis and prognosis for personalised medicine and closed-loop therapeutics.



mdpi.com/si/89710

Special Issue



gels



an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Esmail Jabbari

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

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.

Author Benefits

Open Access: free for readers, with [article processing charges \(APC\)](#) paid by authors or their institutions.

High visibility: indexed within [Scopus](#), [SCIE \(Web of Science\)](#), [PubMed](#), [PMC](#), [CAPlus / SciFinder](#), and [other databases](#).

Journal Rank: JCR - Q1 (Polymer Science) / CiteScore - Q2 (Polymers and Plastics)

Contact Us

Gels Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/gels
gels@mdpi.com
[X@Gels_MDPI](#)