

Special Issue

Hydrogel-Based Sensors for Biomedical Applications

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.

Guest Editor

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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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