Special Issue

Gel-Based Materials: Preparations and Characterization

Message from the Guest Editors

Gel-based materials have important applications in our daily lives. Conventionally, they have been widely used in cosmetics, foods, and paints. However, recently, they have been used in a broader range of fields such as energy, the environment, and medicine, partly due to the development of low-molecular-weight gelators that utilize molecular self-assembly and commonly used polymer gelators. This increase in gelation methods is likely because gel-based materials are much easier to control based on their rheological properties. Hence, remarkable progress has been made in developing gels with various functions, such as separation, extraction, and stimulus/biomolecule responses. Thus, this Special Issue invites original papers and review articles on the preparations and characterization of gel-based materials with various functions. Topics include: Tough gels; Supramolecular gels (low-molecular-weight gels); Lamellar gel networks (\(\mathbb{Z}\)-form hydrated crystals); Liquid crystal gels; Ionic gels; Gels with separation and extraction functions; Stimuli- or biomolecule-responsive gels; Emulsion gels.

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About the Journal

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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