Special Issue

Gels: Forming Behaviors, Mechanisms, and Food Applications

Message from the Guest Editors

Food gels construct three-dimensional networks through physical or chemical cross-linking mechanisms, which could effectively trap water, oil, or air, and can precisely control the texture, rheological properties, stability, and nutrient-/flavor-release behavior of foods. This Special Issue discusses key carriers for constructing salt reduction strategies, solving chewing and swallowing difficulties (such as developing elderly-friendly foods with specific rheological properties), and designing clean label products. Moreover, it also shows the great potential of efficient delivery and targeted release of food-derived bioactive ingredients (such as probiotics, vitamins, polyphenols, and curcumin) and nutritional molecules. In addition, functionalized gel materials for green biodegradable food packaging, edible fresh-keeping coatings, and scaffolds can be prepared by regulating gel formation technologies (such as 3D/4D printing, stimulus-responsive design, and multi-component composites)

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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

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