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Bioactive Gel Films and Coatings Applied in Active Food Packaging

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Message from the Guest Editors

Recently, the trends in circular economy and sustainability have driven nanotechnology towards the development of novel and innovative applications in the food packaging sector, which is rather recent compared with their use in biomedical and pharmaceutical applications.

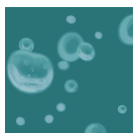
Bioactive films and coatings based on natural biopolymers such as chitosan, sodium alginate and gelatin, and containing antioxidant and antimicrobial agents such as micro- and nanoemulsions of phytochemicals and nanostructured materials such as quantum dots, ZnO nanoparticles, nanoclays, silicas, zeolites and activated carbons, are finding application in various sectors of the food industry, especially in the development of novel edible active packaging films and coatings. These bioactive films and coating materials enhance solubility, improve bioavailability, facilitate controlled release, and protect bioactive components during manufacture and storage.

This Special Issue intends to provide an overview of bioactive gel films and coatings applied in active food packaging.



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Special Issue



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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.

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