







Special Issue Reprint

Bioactive Gel Films and Coatings Applied in Active Food Packaging

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Recently, the trends of a 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 Issue intends to provide an overview of bioactive gel films and coatings applied in active food packaging.





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