

Special Issue

Biodegradable and Edible Films for Food Packaging Applications

Message from the Guest Editors

Biodegradable films are desirable as packaging materials because of their attractive properties such as nontoxicity, sustainability, biocompatibility, reproducibility, versatility, availability, and low carbon footprint. Furthermore, edible biodegradable films provide support to the natural layers on the food product surfaces. These films can prevent gas aromas, moisture losses, and solute movement out of the food. Simultaneously, they can selectively allow for the controlled exchange of gases, such as oxygen, carbon dioxide, and ethylene, which are involved in food respiration. Edible films are made of digestible ingredients, and recently, such materials have seen increased consumer demand due to their environmentally friendly nature, safety to consumers, and ease of use. Edible films can increase food quality, freshness, and shelf-life. The edible films form a semipermeable barrier around the packaged food product, increasing its barrier properties by reducing the exchange of moisture, lipids, gases, and volatiles. This Special Issue aims to present innovative ideas and recent advances in the development of biodegradable, edible film materials for food packaging applications.

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