

عنوان مقاله:

Applications of nanotechnology in food packaging

محل انتشار:

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خلاصه مقاله:

Background and Aim: Food packaging materials have disadvantages such as non-degradability in the environment, low strength and permeability to oxygen, which has led scientists to new technologies. Go to solve these problems. Due to the antimicrobial properties of nano-coatings, it is one of the most important applications in the packaging industry. Therefore, the present study was conducted to investigate the applications of nanotechnology in food packaging. Materials and Methods: This study was a review. The articles were first selected according to the title related to the research objectives, then the abstract of the study articles and related articles were separated. Result: the nanoparticles used in food industry packaging contain titanium dioxide nanoparticles, silver nanoparticles, magnesium oxide, gold nanoparticles, nano-encapsulation, nanocomposite, nanoclay particles, biosensor, electrospinning, nanocapsule containing essential, nano lipid, carbon nanotube, nanoencapsulation and nano melanin. Conclusion: Nanotechnology is an effective tool in the food packaging industry and can play a major role in maintaining quality, inhibiting microbial growth, food safety, reducing the consumption of useful raw materials and reducing waste production.

کلمات کلیدی:

packaging, food industry, nanotechnology

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