عنوان مقاله:

Fabrication of Papain Nanoparticles as a Potential Candidate for Drug Delivery and Food Science Application

محل انتشار:

چهاردهمین کنگره ملی مهندسی شیمی ایران (سال: 1391)

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خلاصه مقاله:

While nanobioteccnology is developing worldwide for establishing sustainable life, using nanoparticle is also helpful for biological applications. Papain is a highly active plant proteaseobtained from Carica papaya Linn. The physicochemical properties of papain recommend that it could be appropriate for novel food and drug delivery system. During this analysis, fabrication of papain nanoparticles by simple coacervation method was carried out. Following the desolvation of papain with acetone, the made nanoparticles were stabilized and cross linked by addition 200 µl of 25% glutaraldehyde. The nanoparticle sample was purified with 15000 rpm centrifuge for 20 min, then the supernatant was dialyzed. Moreover, fabricated nanoparticles were analyzed by dynamic light scattering (DLS) as well as atomic force microscopy (AFM). The mean particle size of the produced nanoparticles achieved was 107 nm

کلمات کلیدی:

Papain, Nanoparticles, Simple Coacervation Method, Dynamic Light Scattering

لینک ثابت مقاله در پایگاه سیویلیکا: