

## عنوان مقاله:

SYNTHESIS OF AN INORGANIC HYDROGEL BASED ON STARCH AND GELATIN VIA SCHIFF BASE REACTION

## محل انتشار:

چهارمین همایش ملی شیمی، پتروشیمی و نانو ایران (سال: 1395)

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## خلاصه مقاله:

Polysaccharide-based hydrogels are remarkable materials for the biomedical fields because of its excellent biodegradation and biocompatibility. In this work, a novel polysaccharide-based hydrogel was fabricated by in situ crosslinking of starch and gelatin. Starch was oxidized with periodate to produce aldehyde groups. The reaction takes place through the formation of Schiff bases between aldehyde groups of starch and amino groups of gelatin. The effect of various process parameters such as reaction time, reaction temperature, starch concentration, gelatin content and periodic acid concentration on the efficacy of the crosslinking (aldehyde content) was investigated.

## کلمات کلیدی:

Hydrogel; Starch; Gelatin; Schiff base

## لینک ثابت مقاله در پایگاه سیویلیکا:

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