عنوان مقاله:

A study on fabrication of poly(lactic acid) and gelatin nanofibers and their biodegradation properties

محل انتشار:

دوازدهمین سمینار بین المللی علوم و تکنولوژی پلیمر (سال: 1395)

تعداد صفحات اصل مقاله: 2

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خلاصه مقاله:

Nanofibrous mats of two biopolymers, poly(lactic acid) (PLA) and gelatin, were prepared by electrospinning. Morphology of the mats was investigated by Scanning Electron Microscopy (SEM) and their nanofibrous structure was confirmed. Gelatin nanofibers were crosslinked using a crosslinking agent and their change in morphology was investigated by SEM, too. Nanofibrous structure of gelatin nanofibers was lost to high extent by crosslinking. Biodegradation of nanofibers in Phosphate buffered saline (PBS) solution was evaluated and SEM images showed that PLA nanofibers degraded very slowly but gelatin nanofibers were completely dissolved and should be crosslink to prevent dissolving in aqueous medium.

کلمات کلیدی:

electrospun nanofibers-poly(lactic acid)-gelatin-morphology-biodegradation