

#### عنوان مقاله:

Preparation of Poly (Acrylic Acid) / Silver Composite Nanofibers by Electrospinning and Their Characterization

## محل انتشار:

اولین َکنگره بین َالمللی شیمی و نانو شیمی از پژوهش تا فناوری (سال: 1397)

تعداد صفحات اصل مقاله: 7

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#### خلاصه مقاله:

After fabrication of colloidal silver nanoparticles by chemical reduction of silver nitrate in water and synthesis of polyacrylic by free radical solution polymerization, the mixture of these two samples prepared. Electrospinning of gained PAA was successfully done with and without Ag nanoparticles. The morphology of nanofibers was studied by Field emission scanning electron microscopy (FESEM). The obtained nanoparticles were characterized by their UVvis absorption spectra, Fourier -transform infrared spectroscopy (FTIR) and transmission electron micrograph (TEM) images. Results showed that silver nanoparticles with average diameter of 13 nm were obtained and dispersed homogeneously in PAA nanofibers. Also presence of silver nanoparticles resulted in finer PAA nanicomposite fibers .with diameter of about 70 nm

# کلمات کلیدی:

Nanofibers, Electrospinning, Nanoparticles, Nanosilver, Polyacrylicacid

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