

عنوان مقاله:

(Preparation and Characterization of Polypyrrole/TiO₂ nanocomposites in Presence poly(vinyl pyrrolidone) (PVP

محل انتشار:

اولین همایش ملی نانو تکنولوژی مزایا و کاربردها (سال: 1392)

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خلاصه مقاله:

This work presents the synthesis of Polypyrrole/TiO₂ nanocomposites. This nanocomposites were synthesized in aqueous media by polymerization of pyrrole using FeCl₃ as an oxidant in the presence of poly(vinyl pyrrolidone) (PVP) as a surfactant and TiO₂ nanoparticles. The PPy/TiO₂ nanocomposites were characterized in terms of their particle size, morphology and chemical structure. X-ray diffraction (XRD) and fourier transform infrared (FTIR) spectra were used to characterized the structure of the obtained polypyrrole/TiO₂ nanocomposites. Also the morphology of products was characterized by using scanning electron microscope (SEM). The results indicate that, the morphology and particle size of products are dependent on the presence of surfactant and metallic oxide

کلمات کلیدی:

Polypyrrole, Nanocomposite, Titanium Oxide, Morphology, X-ray Diffraction

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