

عنوان مقاله:

Investigation of solubility of Poly[3,4-ethylenedioxythiophene] in Poly(styrenesulfonate) and Increase The Conductivity

محل انتشار:

دومین کنفرانس بین المللی یافته های نوین پژوهشی در شیمی و مهندسی شیمی (سال: 1395)

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خلاصه مقاله:

In this work, Poly(3,4-ethylenedioxythiophene): poly(styrenesulfonate) PEDOT:PSS has been synthesized chemically. PEDOT is insoluble in many solvents but can be dispersed in water in the presence of polystyrene sulfonate(PSS). In this paper, the occurred modifications in PEDOT:PSS is investigated. The weight ratios of EDOT to PSS were 1:1, 1:7 and 1:14 in order to form smooth thin because PSS increased solubility of PEDOT in water. PEDOT:PSS, was spin-coated on the glassy surface. The PEDOT:PSS coated was rinsed by DI water and remove PSS from polymer and by this work we can increase conductivity of polymer. The structure of the polymer were characterized by ultraviolet-visible (UV-vis) absorption spectroscopy. The UV-vis results showed that the polymers were successfully synthesized. The conductivities of the polymer films were measured by Multimeter

کلمات کلیدی:

conductive polymer, conductivity, Poly(3,4-ethylenedioxythiophene): poly(styrenesulfonate), solution

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