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عنوان مقاله:

Surface Morphology Investigation of ITO Antistatice Nanocomposite via Sol-Gel Method

محل انتشار:

یازدهمین سمینار بین المللی علوم و تکنولوژی پلیمر (سال: 1393)

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خلاصه مقاله:

In this study nano-composite hybrid coatings developed by sol-gel method have studied. The hybrid sols were prepared by hydrolysis and condensation of GPTMS and TMOS precursors in presence of an acid, as catalyst, and EDA as curing agent. Considering its good electrical conductivity, Indium Tin Oxide (ITO) nanoparticles were used as antistatic agent. To improve the distribution/ dispersion of ITO nanoparticles in the polymer matrix, the surface of nanoparicles was modified with silane groups (m-ITO). The surface morphology of coatings was investigated through SEM and AFM analysis. The cubic shape and nanometric size of the nanoparticles in the hybrid coatings were .(monitored by transmission electron microscopy (TEM

کلمات کلیدی:

Nano-composite, Antistatic- Coatings, Hybrid, ITO Nanoparticles, sol-gel

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