عنوان مقاله:

SYNTHESIS AND OPTICAL CHARACTERIZATION OF CNT/TIO2 COMPOSITE POLYMER NANOFIBERS

محل انتشار:

دهمین سمینار بین المللی علوم و تکنولوژی پلیمر (سال: 1391)

تعداد صفحات اصل مقاله: 1

نویسندگان:

Neda Moazezi - *Phhysics Department, Factually of Basic Sciences, Tarbiat Modares University, P.O.Box: 14115/175, Tehran, Iran Phhysics Department, Factually of Basic Sciences, Islamic Azad University, Tehran Central Branch, Tehran, Iran*

Rasoul Malekfar - *Phhysics Department, Factually of Basic Sciences, Tarbiat Modares University, P.O.Box: 14115/175, Tehran, Iran*

Shervin Ahmadi - *Department of Composite Engineering and Processing, Iran Polymer Institute, P.O.Box: 14965/115, Tehran, Iran*

Alireza Moazezi - *Materials Science and Engineering, Islamic Azad University, Karaj Branch, Karaj, Iran*

خلاصه مقاله:

Electrospinning process is one of the most modern methods to produce polymer fibers, which utilizes electrical forces to produce polymer fibers with diameters ranging nanoometersusing polymer solutions. electrospun nanofibers have been widely use in various applications, such as filtration, opticaland chemical sensors, photocatalytic applications, electrode materials and biological scaffolds. In this article nanocomposites and nanofibers based on CNT, TiO2,polyvinyl pyrrolidone (PVP) and conductive polymer, polyaniline (PANI) were synthesized and developed for photocatalytic applications. The presence of PANI increases the conductivity of nanofibers. CNT-TiO2 nanofibers have potential applications not only in polluted water treatment but also in other areas such as sensors and solar cells [[1].

کلمات کلیدی: