

عنوان مقاله:

Investigation of Carbon Nanotubes Growing on Pyrex Membrane

محل انتشار:

دومین کنگره بین المللی علوم و فناوری نانو (سال: ۱۳۸۷)

تعداد صفحات اصل مقاله: ۲

نویسندگان:

A Sadigzadeh - Nuclear Science and Technology Research Institute, nuclear science Research school, Tehran

A. A Hosseini - Department of Physics, Mazandaran University, Babolsar, Iran

S Mohammadi

,R Soltani - Department of Physics, Mazandaran University, Babolsar

خلاصه مقاله:

Up to now, so many studies have not been trying to fabricate new filter media by using CNTs. Vander Wal and Hall and Johnson et al. [۱] synthesized directly CNTs upon a metal mesh screen. By growing nanotubes onto a micro pores, Pyrex filters efficiency may be improved. However, the filter composed of entirely nanotubes is not available as a gas or air filters because its pressure drop is considerably high, so that the technical approach that nanotubes are coated onto pyrex filters has been proposed and applied to fabricate nano-filters. Graham et al. have shown that the coating of nanofibers, produced by electrospinning method, on the surface of conventional micron-fibrous filters can significantly improve the filter performance. Carbon nanotubes (CNTs) have considerable aspect ratio and specific surface area, so that they are suggested as a new material, which may be applied for hydrogen storage, gas absorption, filtration and separation [۲]. In this study, we have synthesized CNTs, by a CVD method; in porous pyrex membrane

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/۱۶۳۶۲۱>