

عنوان مقاله:

Photoluminescence properties of aluminum oxide nano powders synthesized by sol- gel method

محل انتشار:

اولین سمپوزیوم بین المللی نانو تکنولوژی (سال: 1395)

تعداد صفحات اصل مقاله: 1

نویسندگان:

Ehsan Sadeghi - *Department of the Physics, University of Kashan, Kashan, Iran Nanoscience and Nanotechnology Research Center, Department of Nanophysics, Kashan University, Kashan, Iran*

Mehdi Khalilvand - *Nanoscience and Nanotechnology Research Center, Department of Nanophysics, Kashan University, Kashan, Iran*

Mostafa Zahedifar - *Department of the Physics, University of Kashan, Kashan, Iran Nanoscience and Nanotechnology Research Center, Department of Nanophysics, Kashan University, Kashan, Iran*

خلاصه مقاله:

Nanoparticles of aluminum oxide (alumina) were synthesized by sol - gel method to achieve alpha phase alumina Heat treated in a furnace at 1100 and various experimental techniques powder of alumina particles using X-ray diffraction pattern (XRD) was approved and the average particle size of 38 nm were obtained from the analysis. The Fourier transform infrared (FT-IR) spectra control various types of functional groups on the surface of alumina nanoparticles were oxy groups such as hydroxyl groups. Which also in photoluminescence (PL) spectra and in the spectrum of luminescence centers due to oxygen vacancy defects (Centers type 2 - F₂ , F₂₂₊ , F) in emission and .excitation spectra were observed

کلمات کلیدی:

Sol-gel, Fourier transform infrared, Photoluminescence

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/513878>

