

عنوان مقاله:

Synthesis of Nanocrystalline Magnesium Oxide with Plate-Like Shape

محل انتشار:

ششمین کنگره بین المللی مهندسی شیمی (سال: 1388)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

Nanocrystalline magnesium oxide with plate-like shape was prepared by a wet chemical synthesis method using polyvinyl alcohol as surfactant. The synthesized samples were characterized by N₂ adsorption (BET), X-ray Diffraction (XRD), Transmission electron microscopy (TEM) and Fourier Transform Infrared (FTIR) analyses. The obtained results showed that the addition of surfactant has a significant effect on the structural properties of magnesium oxide and led to obtain a powder with higher specific surface area and smaller crystallite size. The specific surface area increased with decreasing in metal ion to PVA monomer unit mole ratio (MgO/PVA). Transition electron microscopy (TEM) showed a structure consisting of aggregates or agglomerates of particles forming slit (shaped pores (plates or edged particles like cubes

کلمات کلیدی:

MgO; Nanocrystal; Surface area

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