

عنوان مقاله:

Sol-Gel Synthesis and characterization of nano iron oxide

محل انتشار:

هفتمین کنگره ملی مهندسی شیمی (سال: 1390)

تعداد صفحات اصل مقاله: 9

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خلاصه مقاله:

We have utilized sol-gel method for producing nano structure of xerogel iron oxide with Ferric nitrate nonahydrate as precursor, ethanol as solvent and propylene oxide as gelation agent. Nano oxide at 70°C are produced and evaluated with SEM, TG/DTA, FTIR, and XRD. The results of these analysis confirm the existence of amorph iron oxide, water, γ -Fe₂O₃, α -Fe₂O₃, α -FeO(OH) and Fe(OH)₃ in this mixture. The morphology of these particles shows that they are spherical and agglomerate because of high reactivity and high surface area.

کلمات کلیدی:

Sol-gel, Nano iron oxide, Xerogel

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