عنوان مقاله:

ULTRASOUND-ASSISTED SYNTHESIS OF NANO-SIZED ZIF-8: EFFECT OF DIFFERENT SOLVENTS

محل انتشار:

سومین همایش ملی تکنولوژی های نوین در شیمی،پتروشیمی و نانو ایران (سال: 1395)

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خلاصه مقاله:

Zeolitic imidazolate framework-8 (ZIF-8) has found many attentions in various chemical processes due to some its outstanding characteristics. In this article, ZIF-8 nanocrystals are prepared according a simple method at room temperature. Presence of sonication and the effect of different solvents on the synthesis of Nano-ZIF-8 are investigated. A relative fast synthesis procedure at room temperature using three solvents, Deionized (DI) water along with sonication, Dimethylformamide (DMF) without sonication environment and acetone in presence and without sonication are employed. The obtained results indicate that the formation of ZIF-8 nanocrystals by resorting to sonic waves and green solvents, DI water and acetone, is better than nano-particles obtained in DMF solvent from .crystallinity and particle size point of view

کلمات کلیدی: ZIF-8, Nano-particles, Sonication method, particle size, MOFs

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