عنوان مقاله:

Synthesis of two Cd(II) based metal–organic frameworks : sonochemical synthesis aspect and applications

محل انتشار:

بیستمین کنگره شیمی ایران (سال: 1397)

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خلاصه مقاله:

Synthesis of nanoscale MOFs has also been attractive [1]. Ultrasound irradiation is one of the simplest and most effective methods for preparation of nano or microstructures MOFs [2]. In this simple, fast and green method molecules undergo a chemical reaction because of powerful ultrasound radiation (20 KHz–10 KHz).Nano plates of two Cd(II)-based metal–organic frameworks, [Cd2(oba)2(4-bpdb)2]n .(DMF)x(TMU-8) and [Cd(oba)(4,4 ' -bipy)]n. (DMF)y (TMU-9) were synthesized via sonochemical reaction by using various time and concentrations of initial reagents and power of irradiation and characterized by scanning electron microscopy, X-ray powder diffraction and IR spectroscopy. Moreover, the effect of triethylamine on speed of nucleation during the synthesis was investigated. Thermolysis of these MOFs at 550 ˚C under air atmosphere yields CdO nanoparticles

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا: