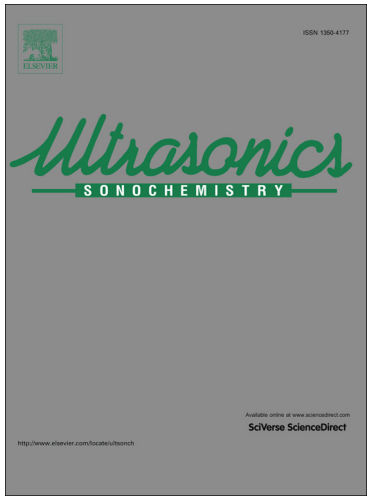

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A systematic study on the use of ultrasound energy for the synthesis of nickel–metal organic framework compounds

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Abstract

A nickel metal-organic framework (Ni-MOF) was successfully synthesized using ultrasound irradiation. Further to this, X-Ray Diffraction (XRD), Scanning Electron Microscopy (SEM), Fourier Transform Infrared Spectroscopy (FT-IR), Thermo-Gravimetric Analysis (TGA), Differential Scanning Calorimetry (DSC) and nitrogen adsorption [i.e. Brunauer-Emmett-Teller (BET) Surface Area Analysis] techniques were used to characterize the synthesized Ni-MOF. In addition, the effect of sonication on the surface area, pore diameter and pore volume of the final

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