

## عنوان مقاله:

Low temperature synthesis of nanocrystalline calcium aluminate compounds with surfactant-assisted precipitation method

## محل انتشار:

هفتمین کنگره ملی مهندسی شیمی (سال: 1390)

تعداد صفحات اصل مقاله: 8

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## خلاصه مقاله:

Nanocrystalline calcium aluminates with different CaO:Al<sub>2</sub>O<sub>3</sub> ratios were prepared by wet chemical synthesis method using Poly (ethylene glycol)-block-poly(propylene glycol)-block poly(ethylene glycol) (PEG-PPG-PEG, MW:5800) as surfactant. The synthesized samples were characterized by N<sub>2</sub> adsorption (BET), X-ray diffraction (XRD), Fourier Transform Infrared (FTIR), Thermal and differential thermal gravimetric (TGA/DTG) analyses. The results showed that the addition of surfactant increased the specific surface area and decreased the particle sizes of 12CaO.7Al<sub>2</sub>O<sub>3</sub>, CaO.Al<sub>2</sub>O<sub>3</sub> and CaO.2Al<sub>2</sub>O<sub>3</sub>

## کلمات کلیدی:

Calcium aluminates, Nanocrystalline, Surfactant

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/341220>

