

عنوان مقاله:

Induction time of induced crystallization of sulfamic acid nanoparticles

محل انتشار:

دومین کنفرانس بین المللی یافته های نوین پژوهشی در شیمی و مهندسی شیمی (سال: 1395)

تعداد صفحات اصل مقاله: 8

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خلاصه مقاله:

Sulfamic acid nanoparticles were produced by an innovative technique induced crystallization in presence of nanoparticle stabilizer . An anti-solvent was used to create supersaturation in an aqueous sulfamic acid solution. Nanoparticles were produced in presence of polyvinylpyrrolidone (PVP) which acted as the nanoparticle stabilizer. Induction time of nanoparticles formation was measured and correlated with the solution supersaturation. Assessment of the type of correlation led to determination of the nucleation mechanism. Results show that primary homogenous nucleation is dominant. Interfacial tension of nanoparticle/solution was calculated and solubility data for sulfamic acid .in acetone+ water solution was determined

کلمات کلیدی:

Sulfamic acid nanoparticles; Induced crystallization; Anti-solvent; Nucleation

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/477806>

