Large Anisotropic Zeolite Crystals with Controllable Morphology via Microemulsion Mediated Growth

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The current work explores synthesizing large (> 50 μm) zeolite crystals of controllable morphology by using zeolite syntheses with low solubility silica sources (BMD) in the presence of emulsions.

Silicalite-1 BMD syntheses in cationic emulsions

Silicalite-1 BMD syntheses in anionic emulsions

Cancrinite BMD syntheses, no emulsion

Cancrinite BMD syntheses, cationic emulsion