

Supporting information

Effect of crystallization mechanism on zeolite BEA textural and acidic properties

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Table S1. Acidity measured by TPD NH₃

Sample	Al*, μmol/g	Content of weak acid sites a ₁ , μmol/g	Concent of strong acid sites a ₂ , μmol/g	Total concentration of acid sites a ₀ (NH ₃), μmol/g
BEA-SM	1300	670	450	1120
BEA-SS	1300	815	535	1350

- Determined by XRF analysis

Table S2. Acidity measured by FTIR of adsorbed Py

Sample	Al*, μmol/g	B-sites**, μmol/g	L-sites***, μmol/g	Total acidity, μmol Py/g	B/L
BEA-SM	1300	510	618	1128	0.83
BEA-SS	1300	601	447	1048	1,34

*XRF analysis

**Calculated from IR band at 1545 cm⁻¹ using molar integral extinction coefficient of 0.73 cm/μmol taken from [1]

*** Calculated from IR band at 1454 cm⁻¹ using molar integral extinction coefficient of 0.96 cm/μmol taken from [1]

[1]. Mailer S.M., Jentys A., Lercher J.A. //J. Phys. Chem. C, 2011, 115, 8005-8013.

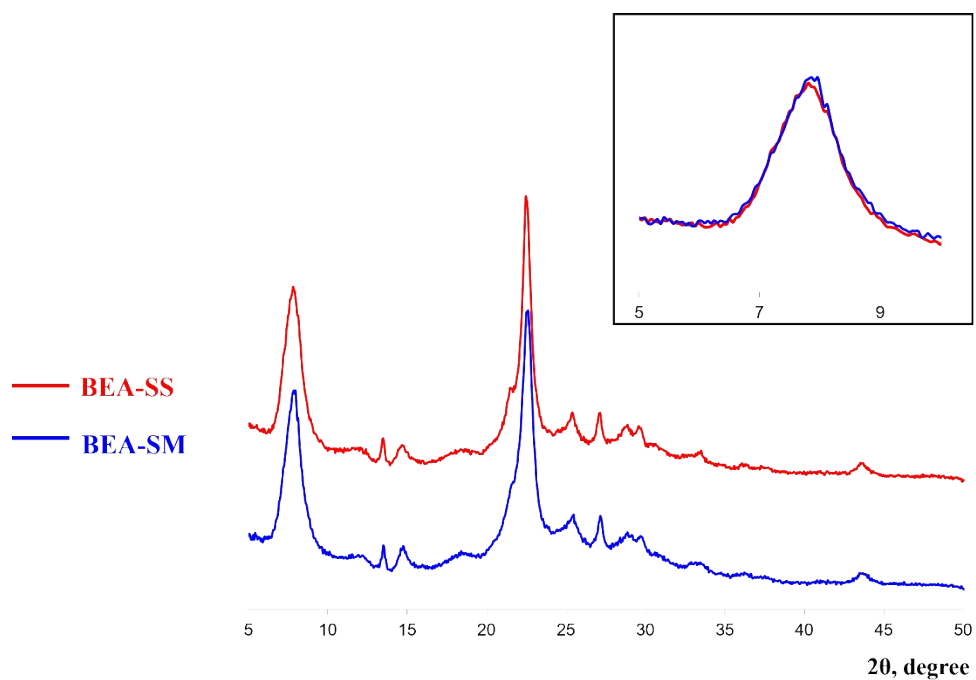


Fig. S1. XRD patterns obtained for BEA samples

The insert shows the region of $5\text{-}10^\circ$ 2θ . The deconvolution of this peak points to similar contribution of polymorphs A and B ($A/B \sim 50/50$) for both samples.

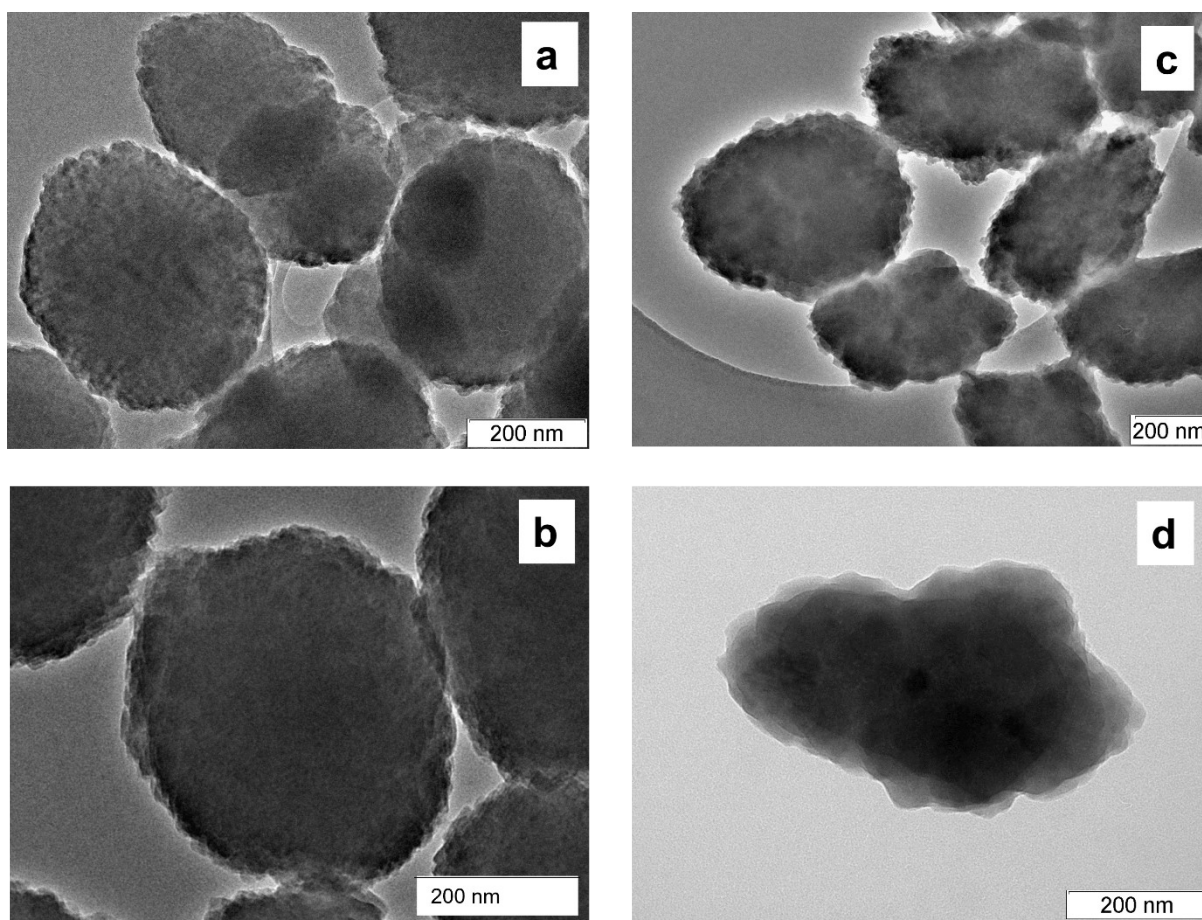


Fig. S2. TEM images of BEA-SM (a,b) and BEA-SS (c,d).

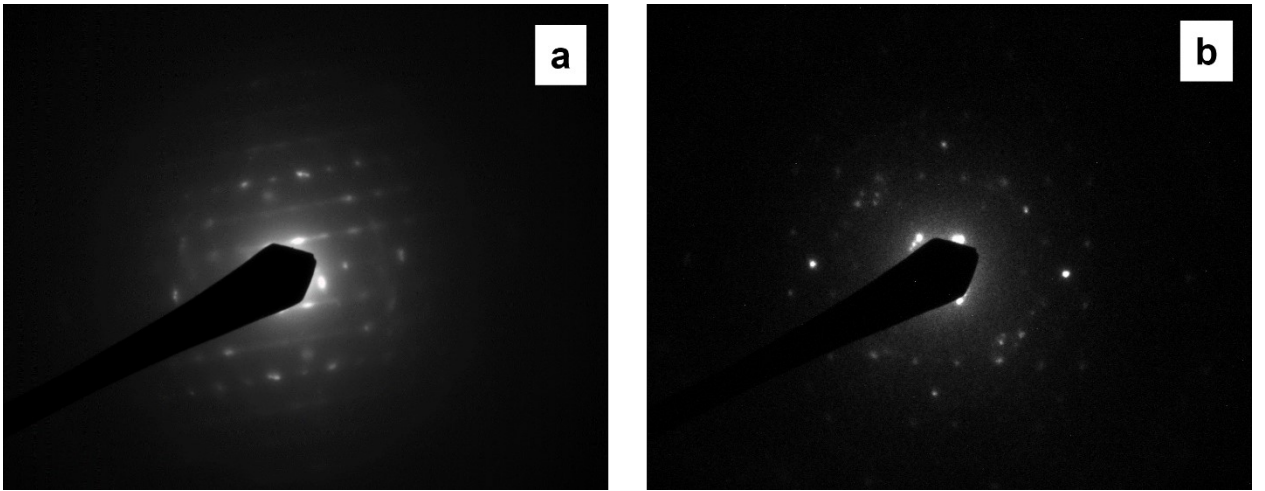


Fig. S3. Local electron diffraction patterns for BEA-SM (a) and BEA-SS (b).

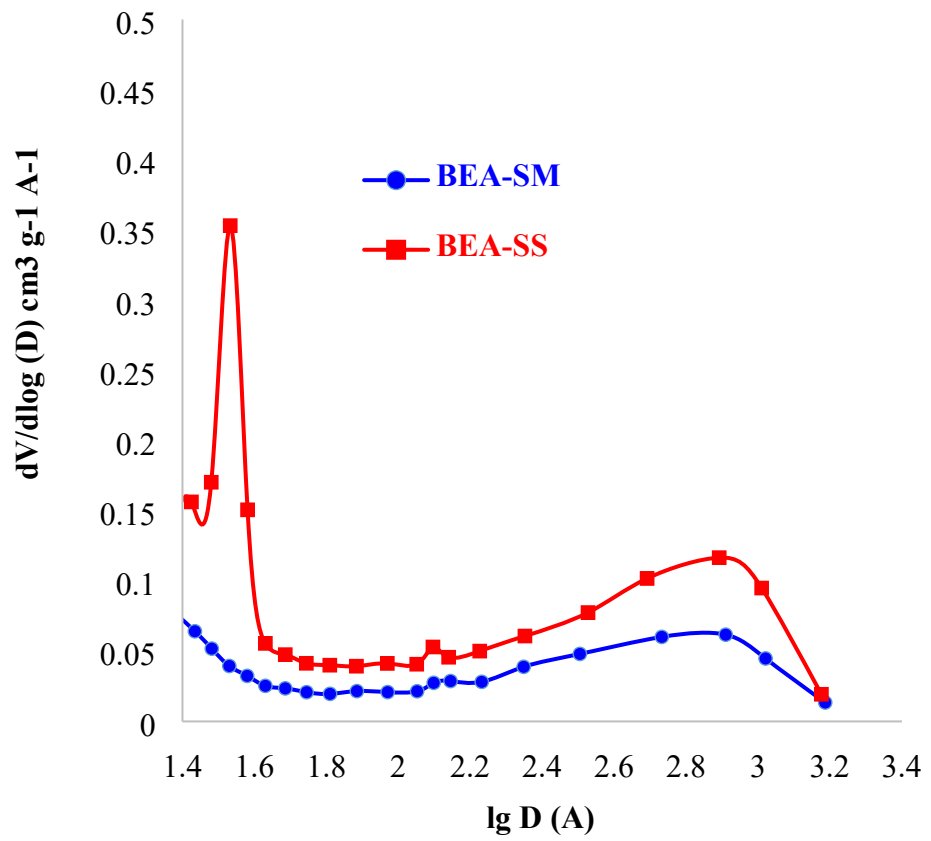


Fig. S4. Pore distribution for BEA samples.