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Supporting information

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Synthesis of zeolite SSZ-24 using a catalytic amount of SSZ-13 seeds

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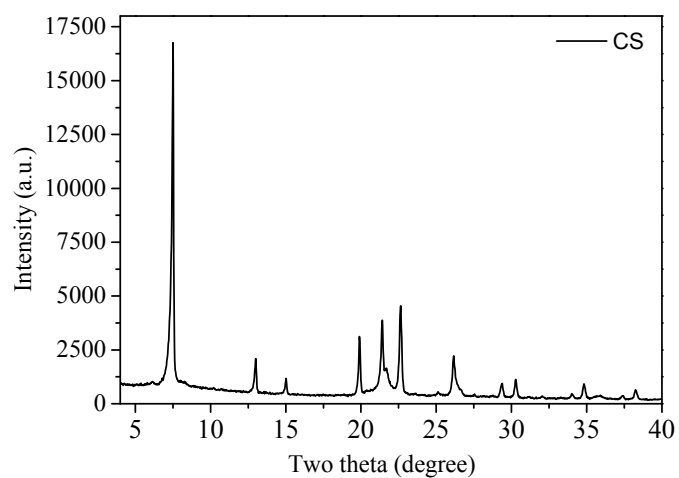
9 Caen, France

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Fig. S1 XRD pattern of reference sample obtained by conventional synthesis (CS).

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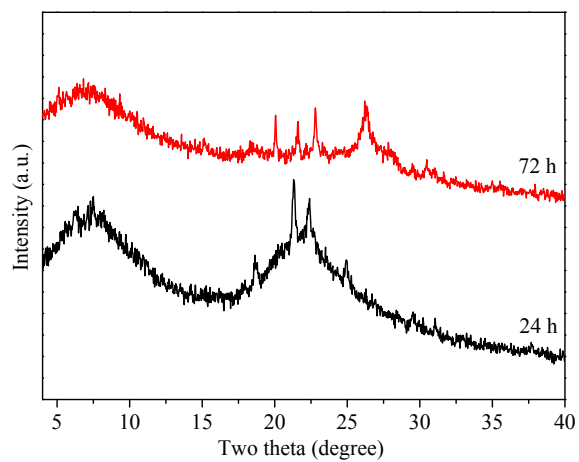
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4 **Fig. S2** XRD patterns of the samples obtained from the conventional system (0.1TMAD: 0.15KOH: 1SiO₂: 44H₂O)
5 with 5 wt.% SSZ-24 seeds added.

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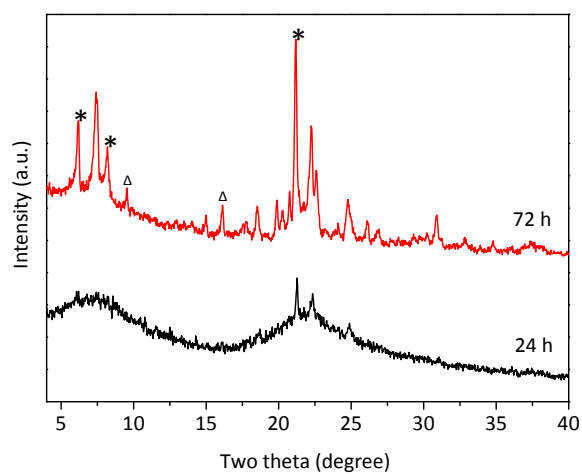
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Fig. S3 XRD patterns of the samples prepared in the conventional system (0.1TMAD: 0.15KOH: 1SiO₂: 44H₂O) with 5 wt.% SSZ-13 seeds added.

* Indicates the SSZ-31 XRD peaks: Δ indicates the SSZ-13 XRD peaks.

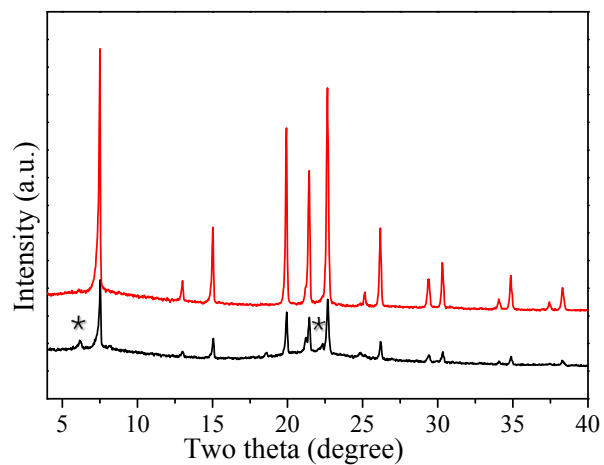
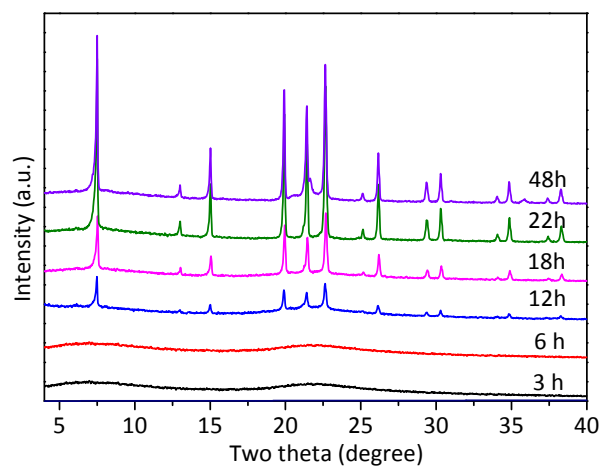


Fig. S4 XRD patterns of the S24-5 samples synthesized at 180 °C for 22 h after a preliminary aging at 100 °C for 1 h (red pattern) and without a preliminary aging at 100°C (black pattern).

* Indicates the SSZ-31 XRD peaks.

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3 **Fig. S5** XRD patterns of the series of samples S13-18 after 3, 6, 12, 18, 22, and 48 h of hydrothermal synthesis.

4 The peak area at 7.42° 2θ was used for the calculation of the crystallinity with respect to the reference CS sample.

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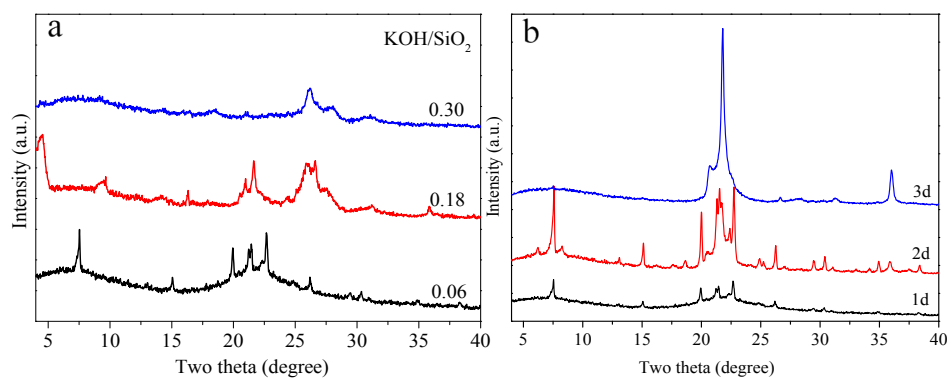
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3 **Fig. S6** (a) Impact of K⁺ content on the crystallization of SSZ-24 at 180°C for 24 h, (b) Impact of the crystallization

4 time on the 0.06 KOH/SiO₂ system.

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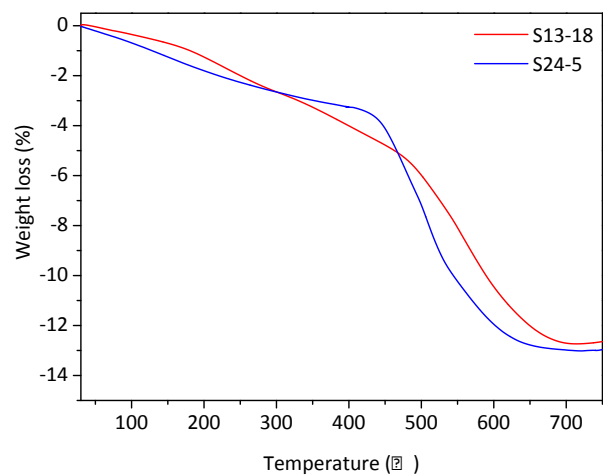
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Fig. S7 TG profiles of S13-18 and S24-5 samples.

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