

## Supplementary information

### Comparative study on different strategies for synthesizing all-silica DD3R zeolite crystals with uniform morphology and size

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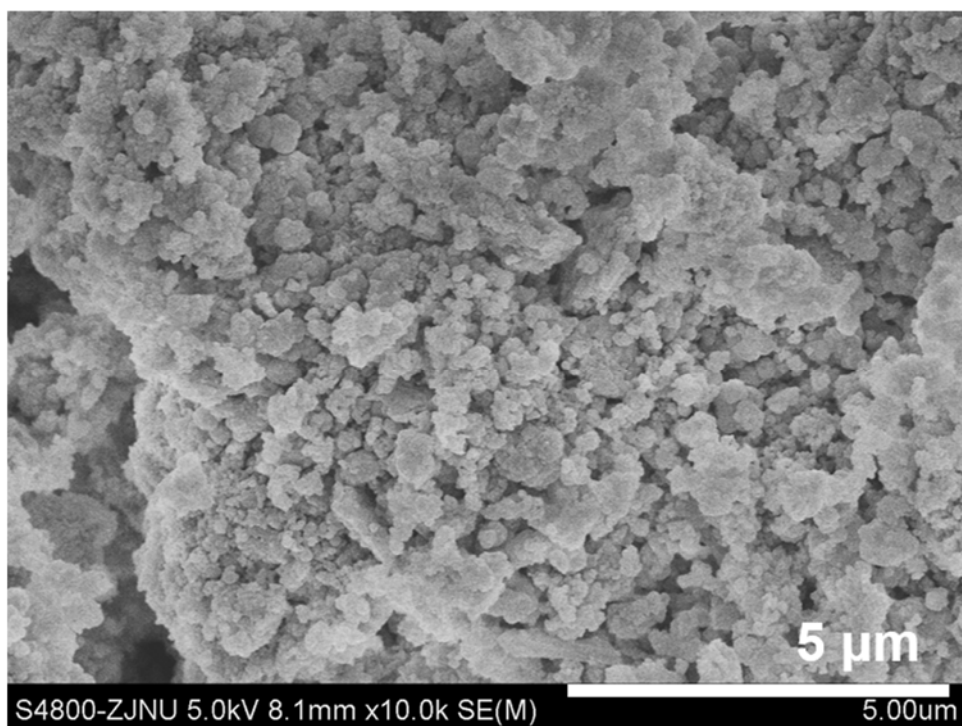


Fig. S1 SEM image of the “amorphous” DD3R seeds.

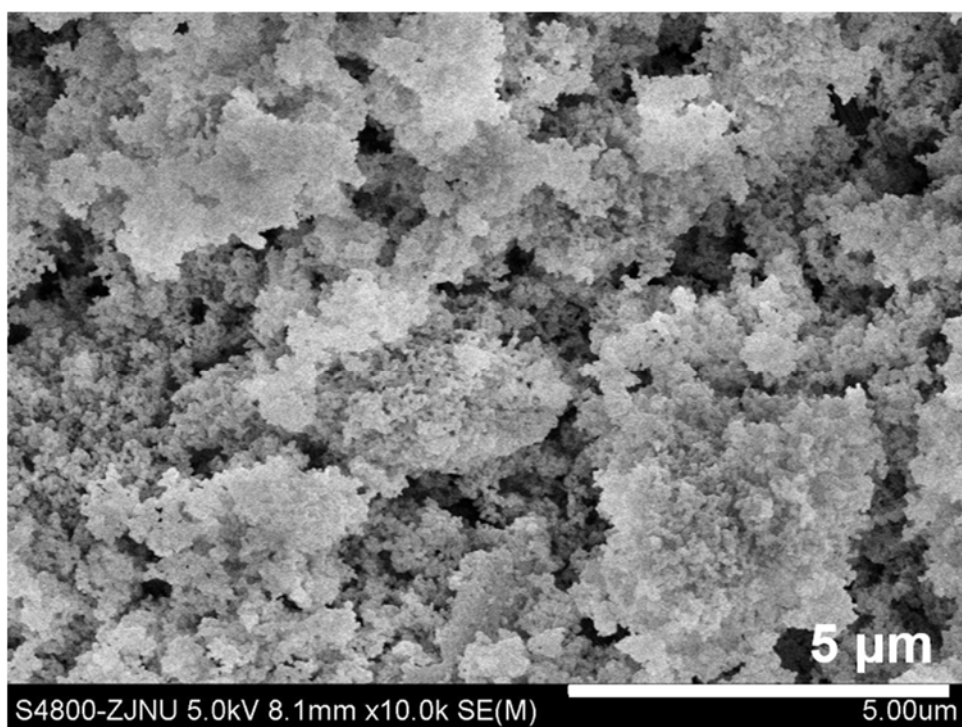


Fig. S2 SEM image of the “amorphous” ZSM-58 seeds.

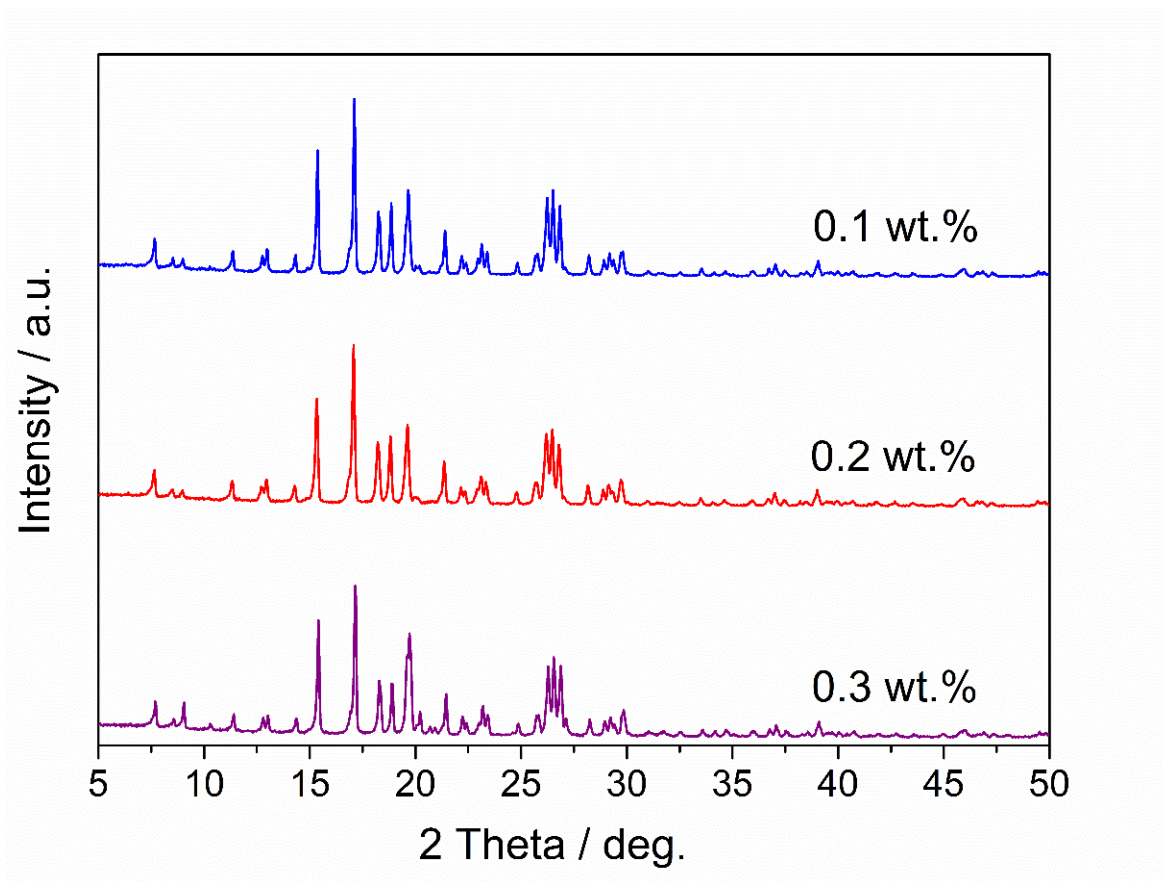


Fig. S3 XRD patterns of the DD3R crystals synthesized using "amorphous" DD3R seeds with different amounts.

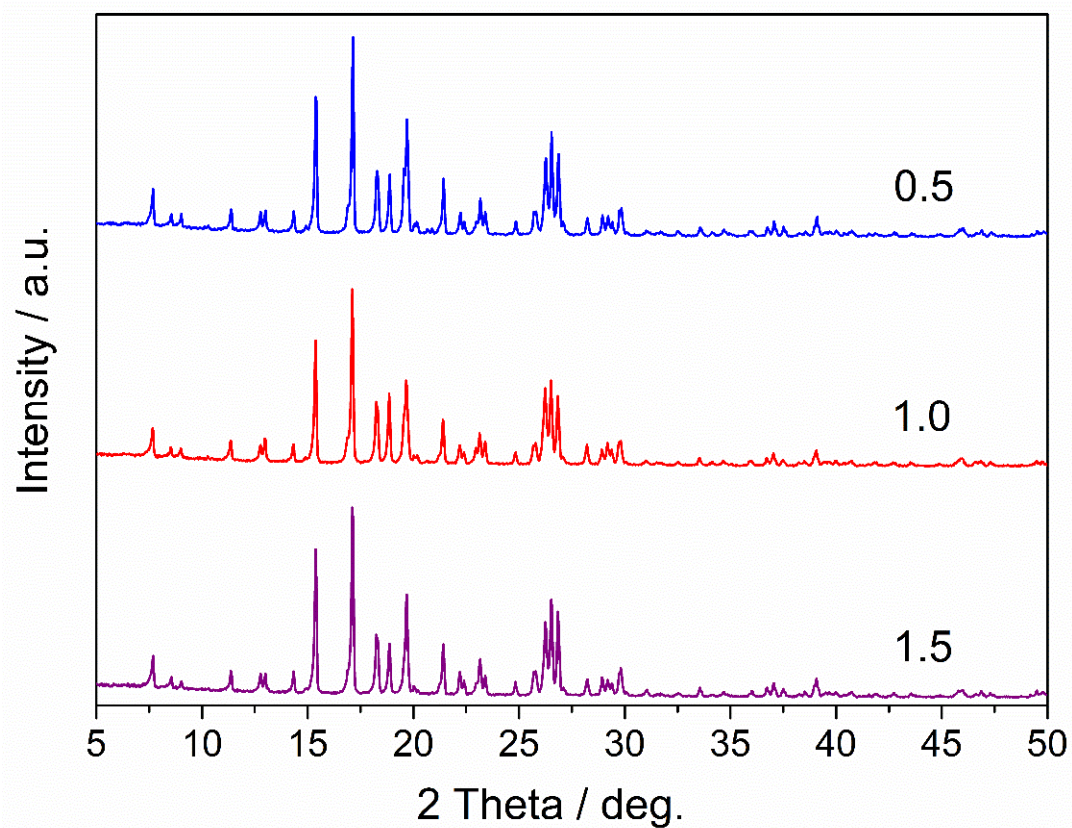


Fig. S4 XRD patterns of the DD3R crystals synthesized using 0.1 wt.% of “amorphous” DD3R seeds with different KF/SiO<sub>2</sub> molar ratios.

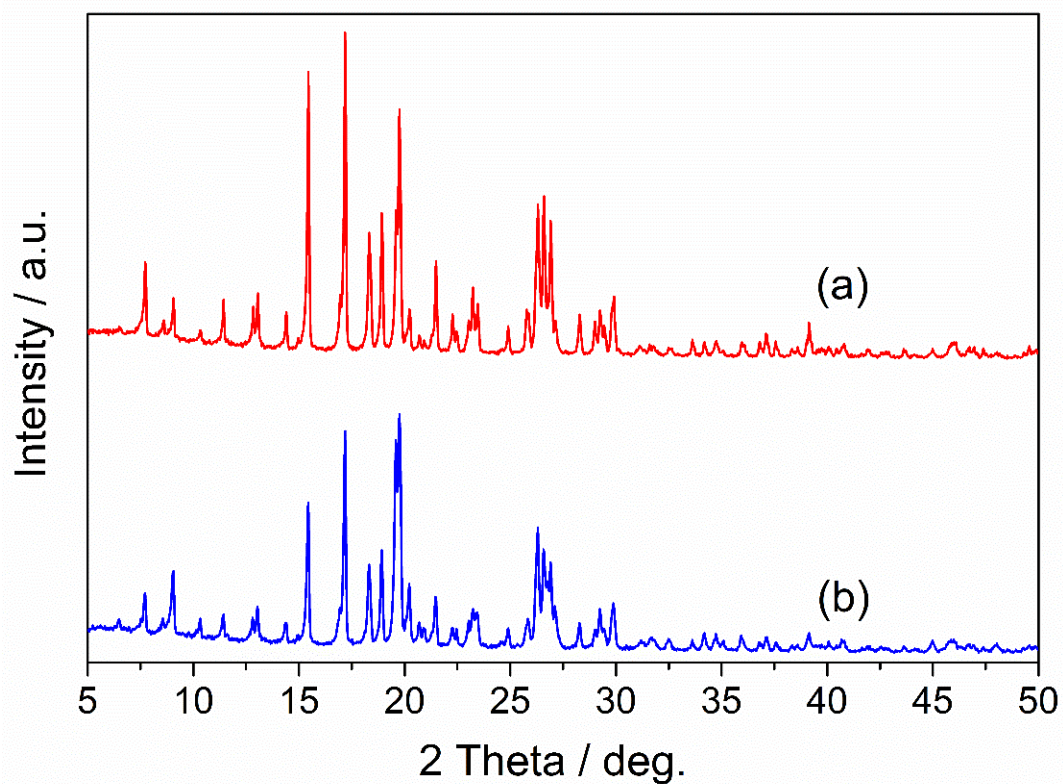


Fig. S5 XRD patterns of the DD3R crystals synthesized using 0.1 wt.% of “amorphous” DD3R seeds with different gel molar compositions: 47 1-ADA : 100 SiO<sub>2</sub> : 100 KF : 6000 H<sub>2</sub>O (a) and 47 1-ADA : 100 SiO<sub>2</sub> : 100 KF : 8000 H<sub>2</sub>O : 2 KOH (b).

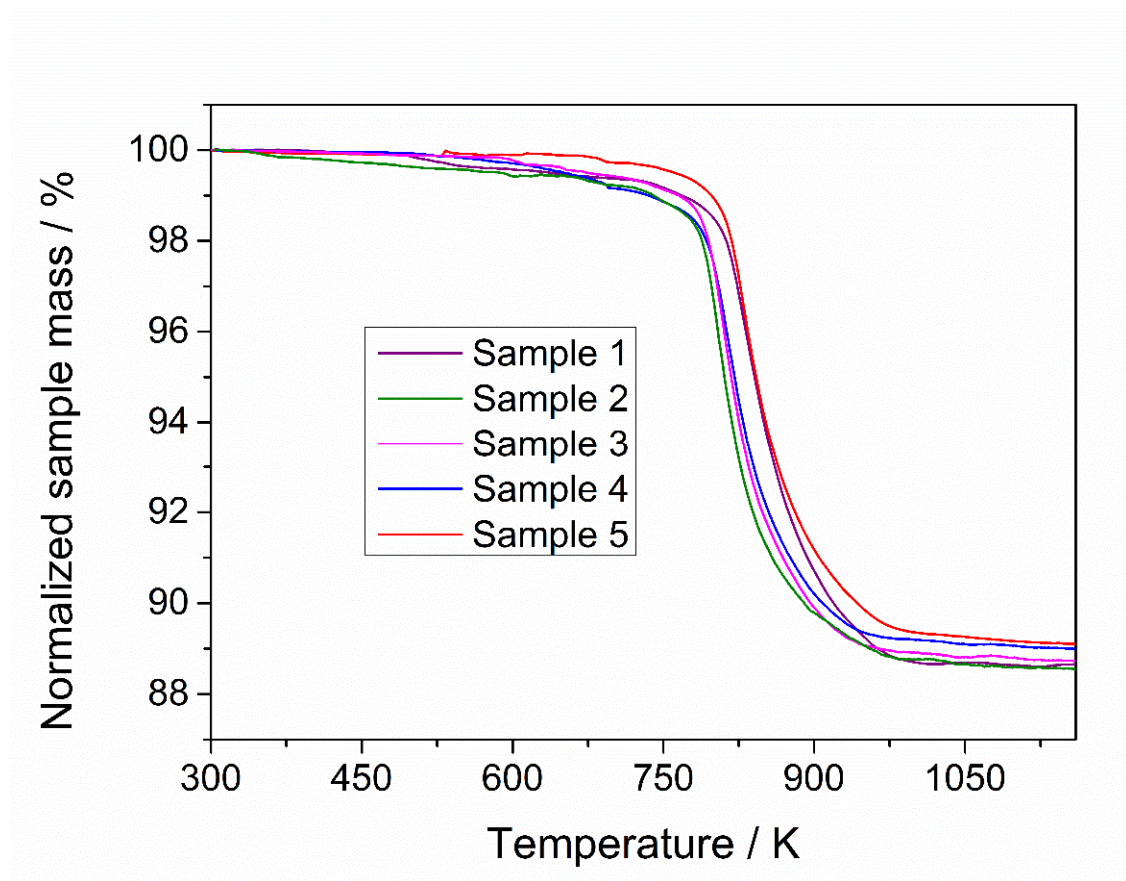


Fig. S6 TGA curves of the synthesized DD3R samples represented in Table 2.