

Supplementary Information for

The synergistic impact of crystal seed and fluoride ion in the

synthesis of Silicalite-1 zeolite in low-template system

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Figure Captions

Figure S1. XRD patterns of Silicalite-1 zeolites with different F/Si ratios: (a) 0, (b) 0.06, (c) 0.1, (d) 0.15, (e) 0.2.

Figure S2. SEM images of Silicalite-1 zeolites with different F/Si ratios: (a) 0, (b) 0.06, (c) 0.1, (d) 0.15, (e) 0.2, (f) 0.2 (High magnification).

Figure S3. XRD patterns of Silicalite-1 zeolites with different S-1 seeds contents: (a) 1 wt%, (b) 5 wt%, (c) 10 wt%, (d) 20 wt%, with a F/Si = 0.1.

Figure S4. High-resolution SEM images of Silicalite-1 zeolites with a F/Si of 0.1 under different S-1 seeds contents: (a) 1 wt%, (b) 5 wt%, (c) 10 wt%, and (d) 20 wt%.

Figure S5. XRD patterns of Silicalite-1 zeolites (S-1 seeds = 10 wt%) with different F/Si ratios: (a) 0.03, (b) 0.05, (c) 0.1, (d) 0.3, (e) 0.4.

Figure S6. SEM images of Silicalite-1 zeolites with different F/Si ratios: (a) 0.03, (b) 0.05, (c) 0.3, and (d) 0.4, with S-1 seeds = 10 wt%.

Figure S7. SEM images of Silicalite-1 zeolites with different crystallization time in the system containing NH_4F alone: (a) 2 h, (b) 4 h, (c) 6 h.

Figure S8. SEM images of Silicalite-1 zeolites with different crystallization time in the system containing S-1 seeds alone: (a) 2 h, (b) 4 h, (c) 6 h.

Figure S9. XRD patterns of Silicalite-1 zeolites with different crystallization time in the system containing NH_4F and S-1 seeds: (a) 12 h, (b) 24 h, (c) 48 h.

Figure S1.

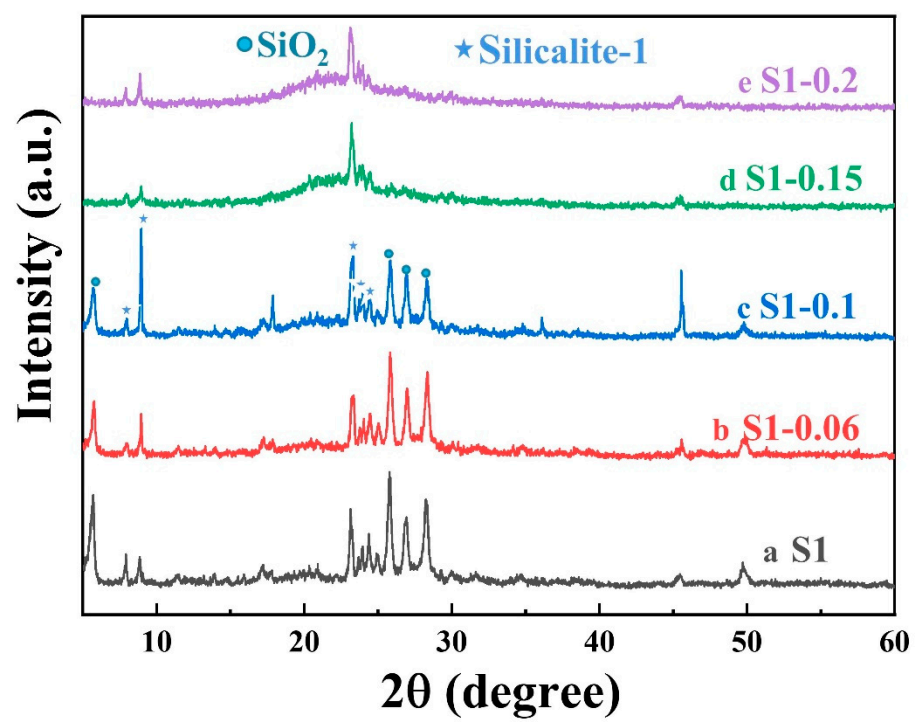


Figure S2.

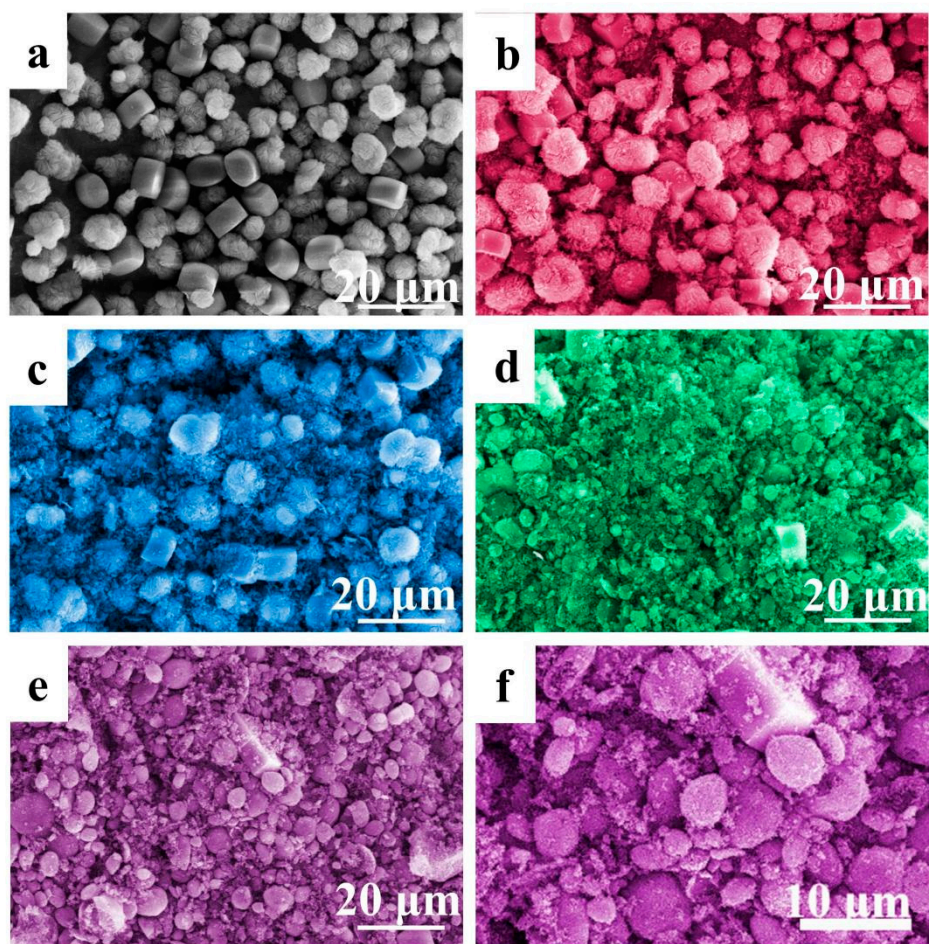


Figure S3.

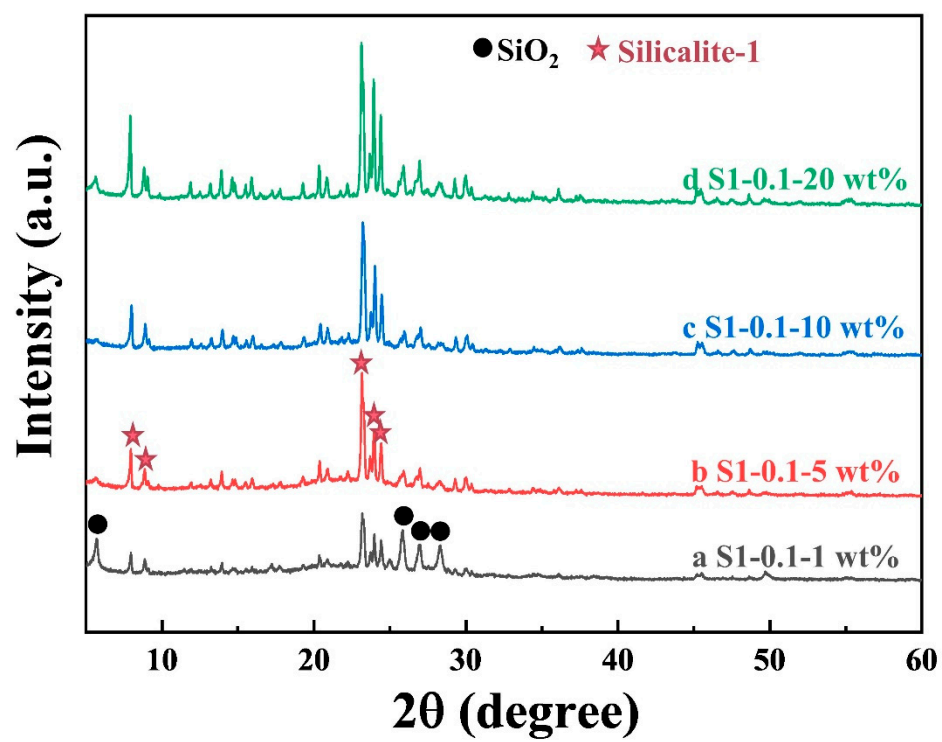


Figure S4.

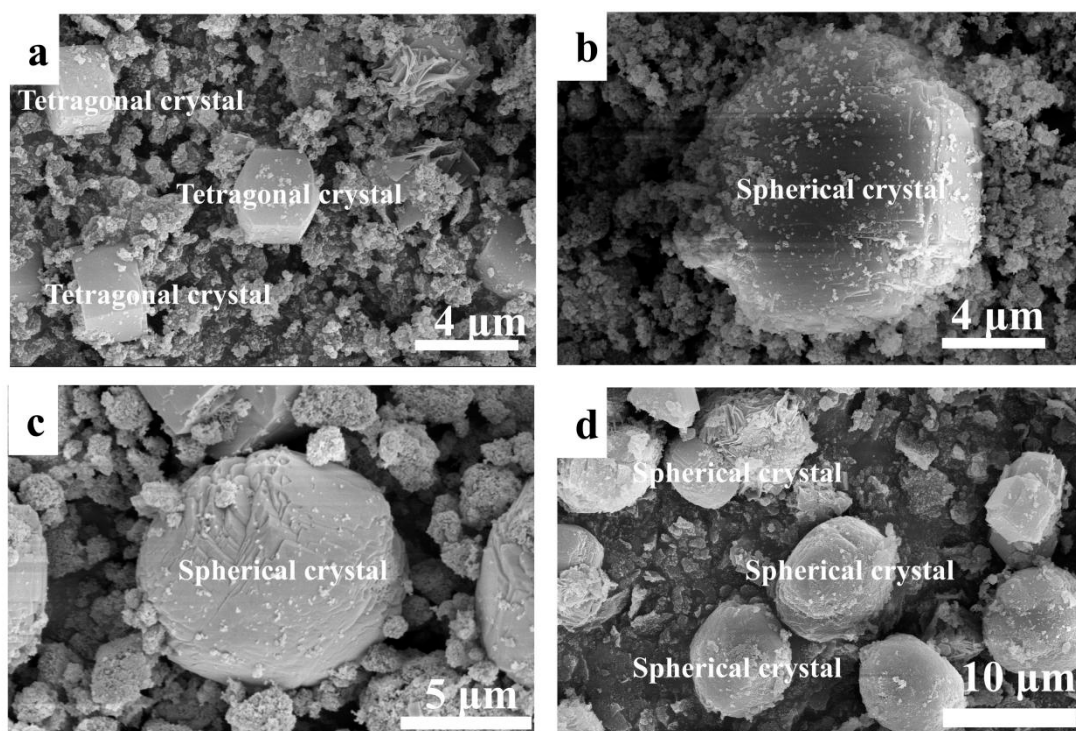


Figure S5.

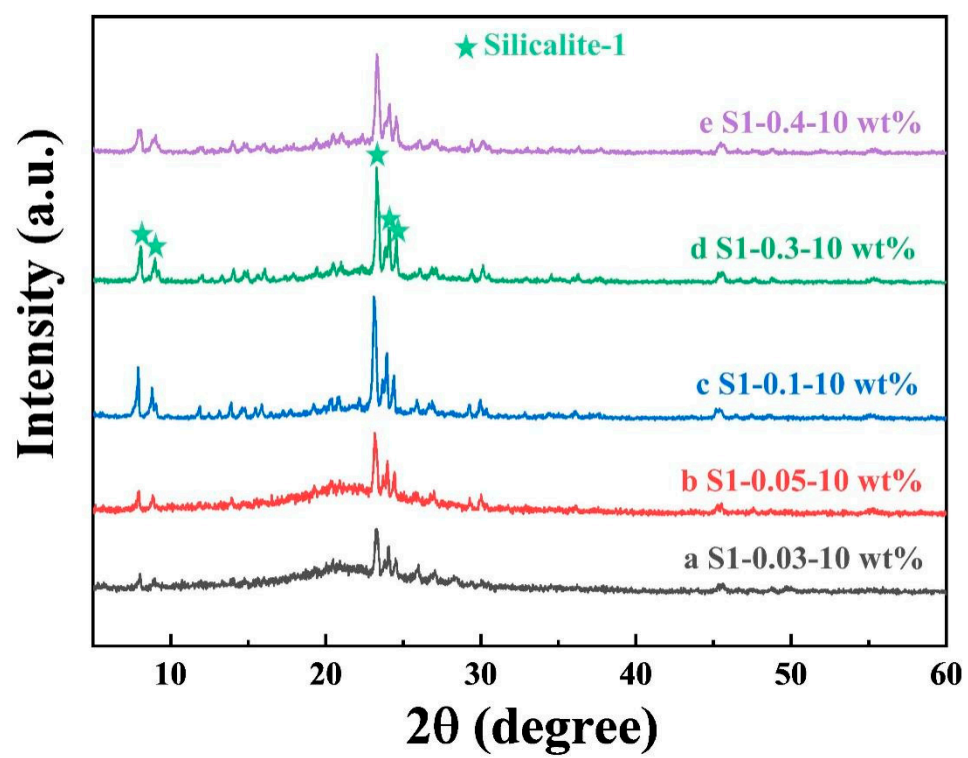


Figure S6.

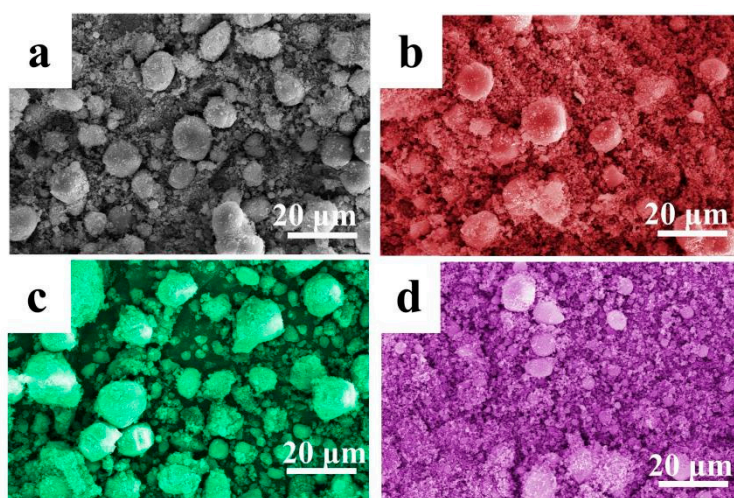


Figure S7.

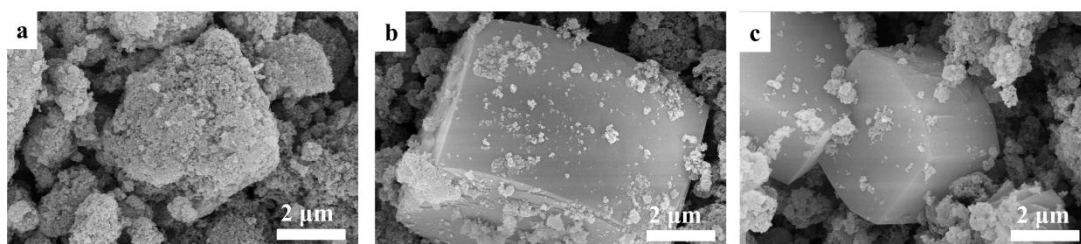


Figure S8.

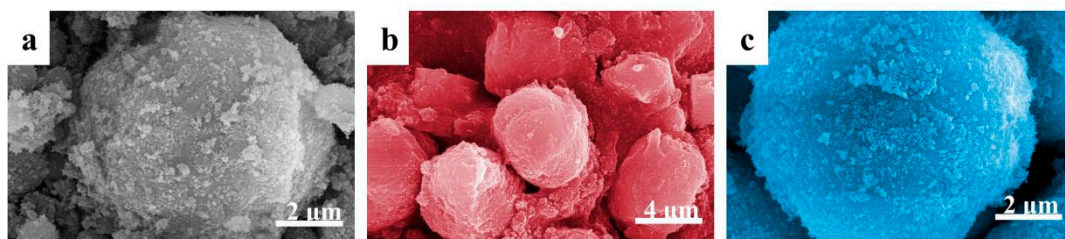


Figure S9.

