Electronic Supplementary Information

Self-assembly of Silicoaluminophosphate Nanocrystals in Biphasic

Media with Water-insoluble Structure-directing Agent

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Table of Contents

Fig. S1 XRD patterns of products synthesized in the presence and absence of toluene. SAPO-31 was synthesized in when THeA was dissolved in toluene, while only tridymite phase was produced in the absence of toluene.

Fig. S2 GC-MS analyses of supernatant toluene solution after synthesis of SAPO-31-H3.

Fig. S3 FE-SEM images and particle size distribution of SAPO-31-H1(a-c), SAPO-31-H2(d-f), SAPO-31-H3(g-i), SAPO-31-H4(j-l), SAPO-31-H5(m-o), and SAPO-31-H6(p-r).

Fig. S4 Elemental mapping for each constituent element of SAPO-31-H3 in HAADF-TEM&EDX measurement.

Fig. S5 Photographs of time-dependent mixtures in the crystallization of SAPO-31-H3 (a) and 24 h treated sample before and after standing for 2 h (b), and optical microphotograph of Pickering emulsion structure for crystallized mixture after discharging from autoclave after heating for 24 h and 48 h (c). The dark margins around each droplet are made up of assembled particulates that separate the interface of a Pickering emulsion.

Fig. S6 XRD patterns of the solid products collected at varied crystallization period during the course of crystallization of SAPO-31-H3 (a) and the corresponding deduced crystallization curve for SAPO-31-H3 (b). The corresponding crystallization curve of SAPO-31-C (b) was adapted from¹ for comparison.

Fig. S7 FE-SEM images of sampled solids during the course of crystallization at varied periods: SAPO-31-H3-0.5h (a), SAPO-31-H3-1.5h (b), SAPO-31-H3-3h (c), SAPO-31-H3-6h (d), SAPO-31-H3-12h (e), SAPO-31-H3-24h (f) and SAPO-31-H3-48h (g).

Fig. S8 HAADF-STEM (a, c) and TEM images (b, d) of Pt/SAPO-31-H3 (a, b) and Pt/SAPO-31-C (c, d).

Fig. S9 Dependences of *n*-dodecane conversion (a), MBs (b), DBs (c) and cracking products (d) selectivities as well as total isomer yields (e) on reaction temperature; relationship of isomer yield with *n*-dodecane conversion (f) over Pt/SAPO-31-H and SAPO-31-C catalysts.

Fig. S10 Isomerized and cracking products distributions of Pt/SAPO-31-C(a-b) and Pt/SAPO-31-H3(c-d) at different reaction temperatures.

Fig. S11 Dependences of *n*-dodecane conversion (a), MBs (b), DBs (c) and cracking products (d) selectivities as well as total isomer yields (e) on the contact time; relationship of isomer yield with *n*-dodecane conversion (f) on Pt/SAPO-31-H3 and Pt/SAPO-31-C.

Fig. S12 Isomers and cracking products distribution on Pt/SAPO-31-C(a-c) and Pt/SAPO-31-H3(d-f) at different contact time.

 Table S1 Catalytic activity and selectivity of Pt/SAPO-31 catalysts at maximum *n*

 dodecane conversion.



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		Temperature (K)									
		513	533	553	573	593	613	633	653	673	693
Pt/SAPO-31-C	Con.(%)	27.6	47.9	62.3	73.7	85.4	89.3	91.1	93	94.1	95.5
	MB Sel.(%)	55.9	50.3	46.1	41.4	35.9	32.3	30.1	27.7	23.3	20.2
Pt/SAPO-31-H1	DB Sel.(%)	42.6	47.4	50.4	52.9	54.2	51.9	45.5	42.1	36.9	32.8
	Con.(%)	37.8	57.9	67.9	75.2	86.1	88.5	91.4	92.8	94.3	94.8
	MB Sel.(%)	92.3	88.6	84.7	82.5	79.8	74.6	62.1	57.5	49.2	42.3
	DB Sel.(%)	7.5	10.9	14.2	16.1	18	22	31.3	29.3	30.9	29.1
Pt/SAPO-31-H2	Con.(%)	44.2	62.9	70.8	78.2	87.7	88.2	92.7	93.2	95.1	95.8
	MB Sel.(%)	76.7	74.2	70.9	66.5	60.7	55.2	49.6	42.1	36.6	29.1
Pt/SAPO-31-H3	DB Sel.(%)	21.5	23.6	25.7	28.9	33	34	33.8	36.4	39.5	34
	Con.(%)	23.8	41.4	54.8	60.1	75.6	79.9	82.6	85.2	87.1	90.6
	MB Sel.(%)	67.3	62.6	57.1	52.4	48.5	44.3	40.1	37.9	33.8	25.4
	DB Sel.(%)	30.8	35	39	42.6	44.1	43.7	37.8	34.2	32.2	32.5
Pt/SAPO-31-H4	Con.(%)	18.9	39.1	52.4	59.8	68.6	78.2	81.3	83.4	85.5	89.7
	MB Sel.(%)	55.9	50.3	46.8	44.1	41.5	38.3	33.1	29.7	24.3	22.2
	DB Sel.(%)	42.2	46.4	48.8	50.6	50.3	48.9	45.5	41.1	35.9	31.7
Pt/SAPO-31-H5	Con.(%)	14.3	34.1	54.2	56.1	60.8	76.6	79.7	82	84.7	88.5
	MB Sel.(%)	85.4	82.1	80.5	77.2	70.9	64.6	58.5	48.8	42.3	37.5
Pt/SAPO-31-H6	DB Sel.(%)	13.9	16.8	17.8	20.4	24.9	29.1	30.8	29.7	30.3	30.3
	Con.(%)	24.2	35.9	47.1	56.9	62.7	68.2	72.7	83.2	85.1	89.8
	MB Sel.(%)	87.6	84.2	82.7	80	75.1	68.8	61.9	53.6	48.7	39.7
	DB Sel.(%)	12	15	16.3	18.8	22.4	26.8	30.4	31.8	31.1	29.9

 Table S1 Catalytic activity and selectivity of Pt/SAPO-31 catalysts at maximum *n*-dodecane conversion.

Reference

1. T. Yue, W. Liu, L. Li, X. Zhao, K. Zhu, X. Zhou and W. Yang, J. Catal., 2018, 364, 308-327.