Electronic supplementary information (ESI)

Manipulating the mesostructure of silicoaluminophosphate SAPO-11 via tumbling-assisted, oriented assembly crystallization: A Pathway to enhance selectivity in hydroisomerization

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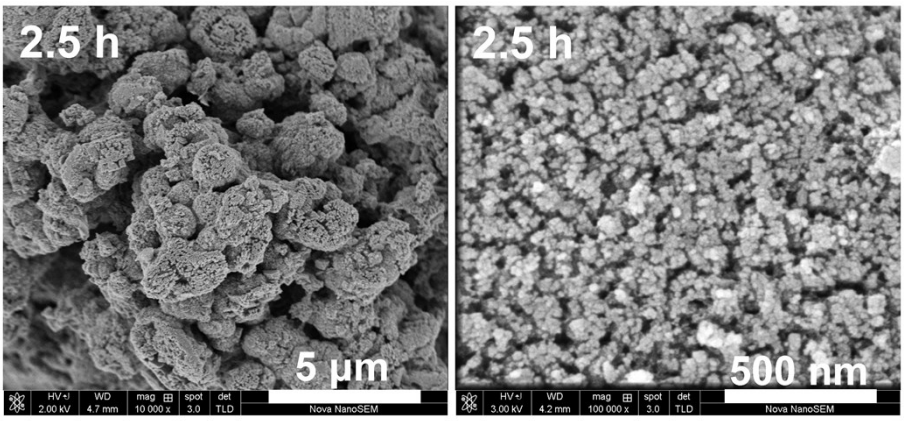

Fig. S1 SEM micrographs of SAPO-11-2.5h in a DGC synthesis.

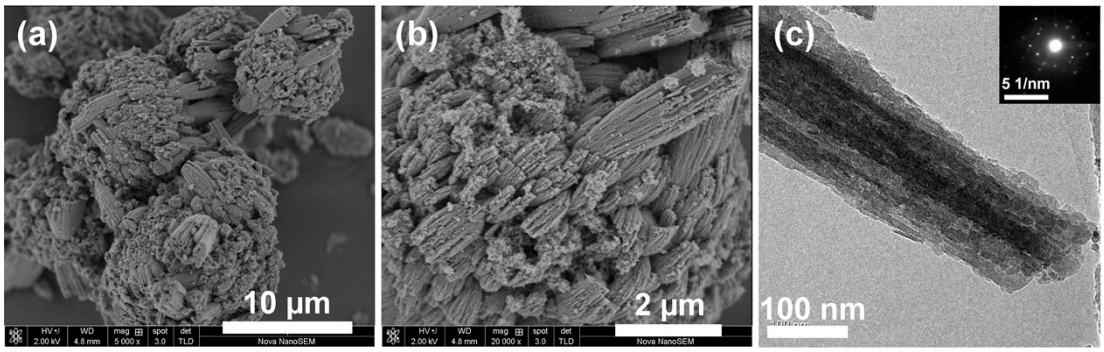

Fig. S2 SEM (a, b), TEM (c) micrographs and associated SAED (inset of c) pattern of SAPO-11-C.

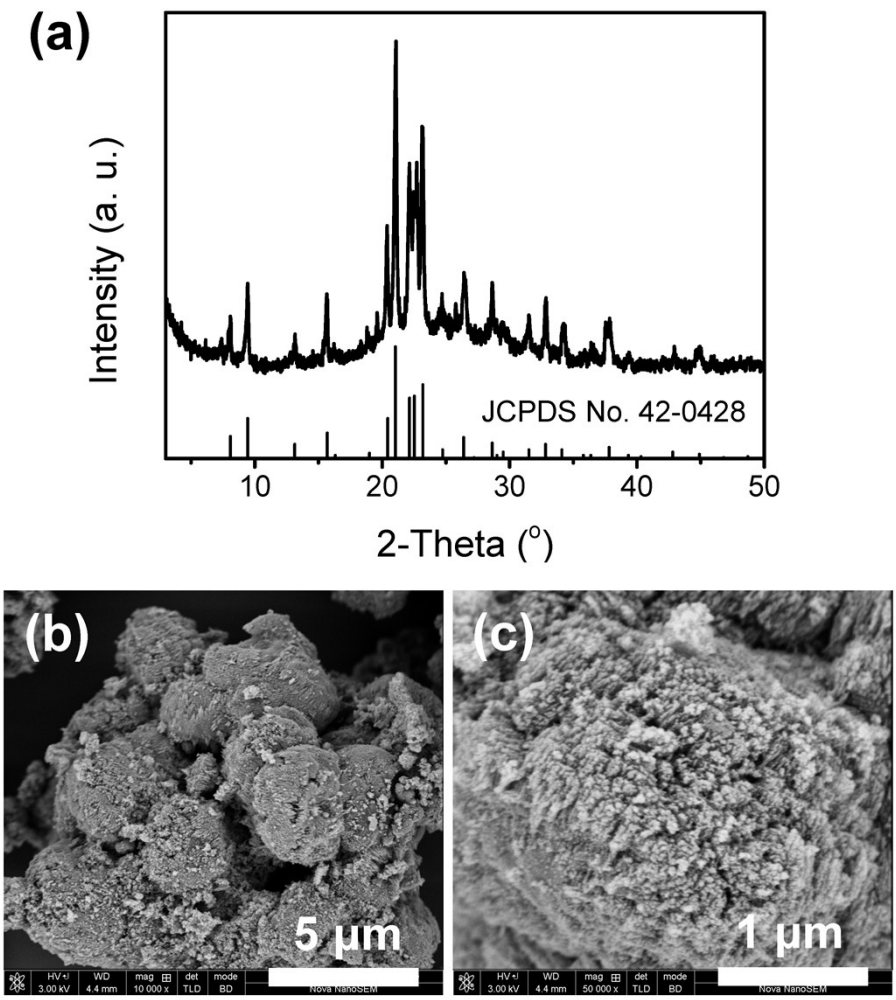

Fig. S3 XRD patterns (a) and SEM micrographs (b and c) for SAPO-11-WT synthesized without growth inhibitors under static condition after 48 h at 473 K from the same prefabricated nanocrystallites.

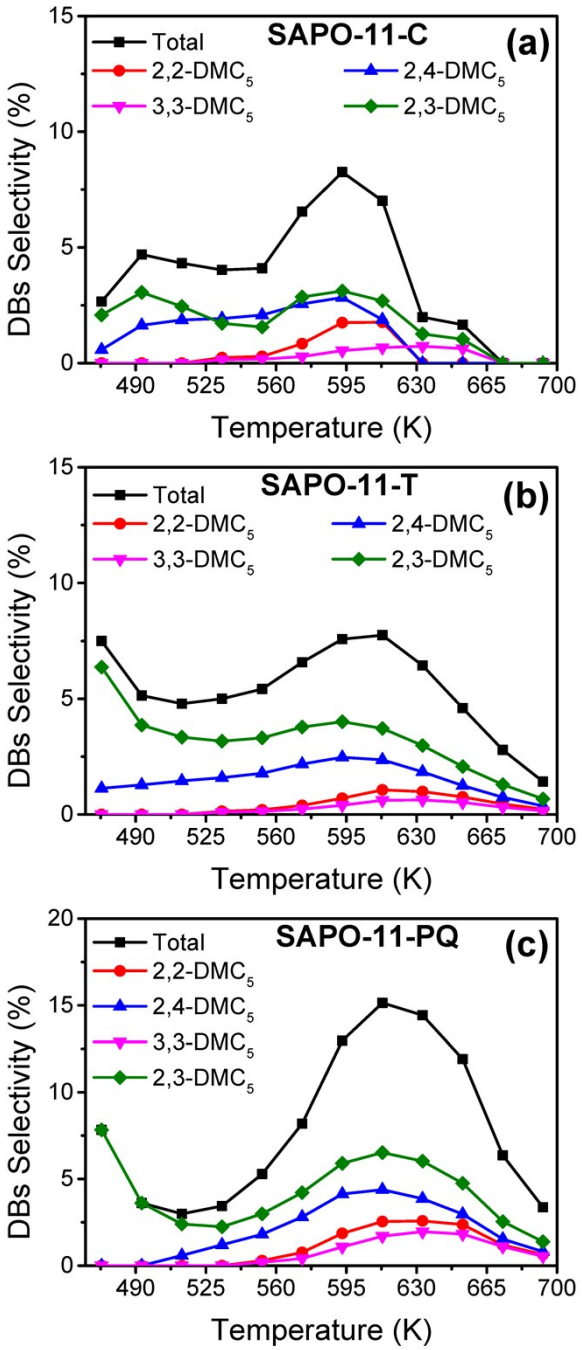

Fig. S4 Total DBs, 2,2-DMC_5, 2,4-DMC_5, 3,3-DMC_5 and 2,3-DMC_5 selectivity versus temperature for Pt/SAPO-11-C (a), Pt/SAPO-11-T (b) and Pt/SAPO-11-PQ (c), respectively.

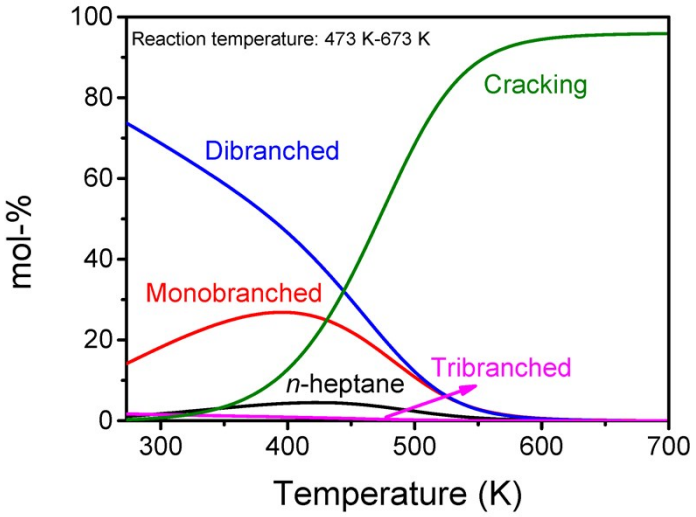

Fig. S5 Thermodynamic equilibrium distribution of C_7 isomers, including cracking side reactions.