## **Supporting Information**

## Synthesis of a novel nano-rod-shaped hierarchical silicoaluminophosphate

## SAPO-11 molecular sieve with enhanced hydroisomerization of oleic acid to iso-

## alkanes

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Fig.S1. The TEM image of the SAPO-11-A



Fig.S2. NH<sub>3</sub>-TPD spectra for different SAPO-11 samples



Fig.S3. Crystallization curves of SAPO-11-A-F obtained during different periods at 200 °C.



Fig.S4. The XRD spectra of the DG-1 sample



Fig.S5.The SEM image of the DG-1 sample



**Fig. S6.** TEM images of the different 7Ni/SAPO-11 catalysts. (a) 7Ni/SAPO-11-S (b) 7Ni/SAPO-11-A-F

Tables S1.Acid site densities of SAPO-11 catalysts by NH <sub>3</sub> -1PD curve		
Catalysts	Peak	Acid site
	temperature	e content <sup>a</sup>
	(°C)	(mmol/g)
SAPO-11-S	215 3	0.90
SAPO-11-A	215 3	0.89
SAPO-11-F	211	- 0.82
SAPO-11-A-F	221 3	0.97

Tables S1.Acid site densities of SAPO-11 catalysts by NH<sub>3</sub>-TPD curve

a Calculated from NH<sub>3</sub>-TPD curve.