

Electronic Supplementary Information

Hierarchical ISI-1 Zeolite catalyst for Hydroconversion of Long-Chain Paraffins

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Table S1. Listed are the different spectral components of the 27Al NMR spectrum of the parent and desilicated ISI-1 zeolites and their respective assignments.

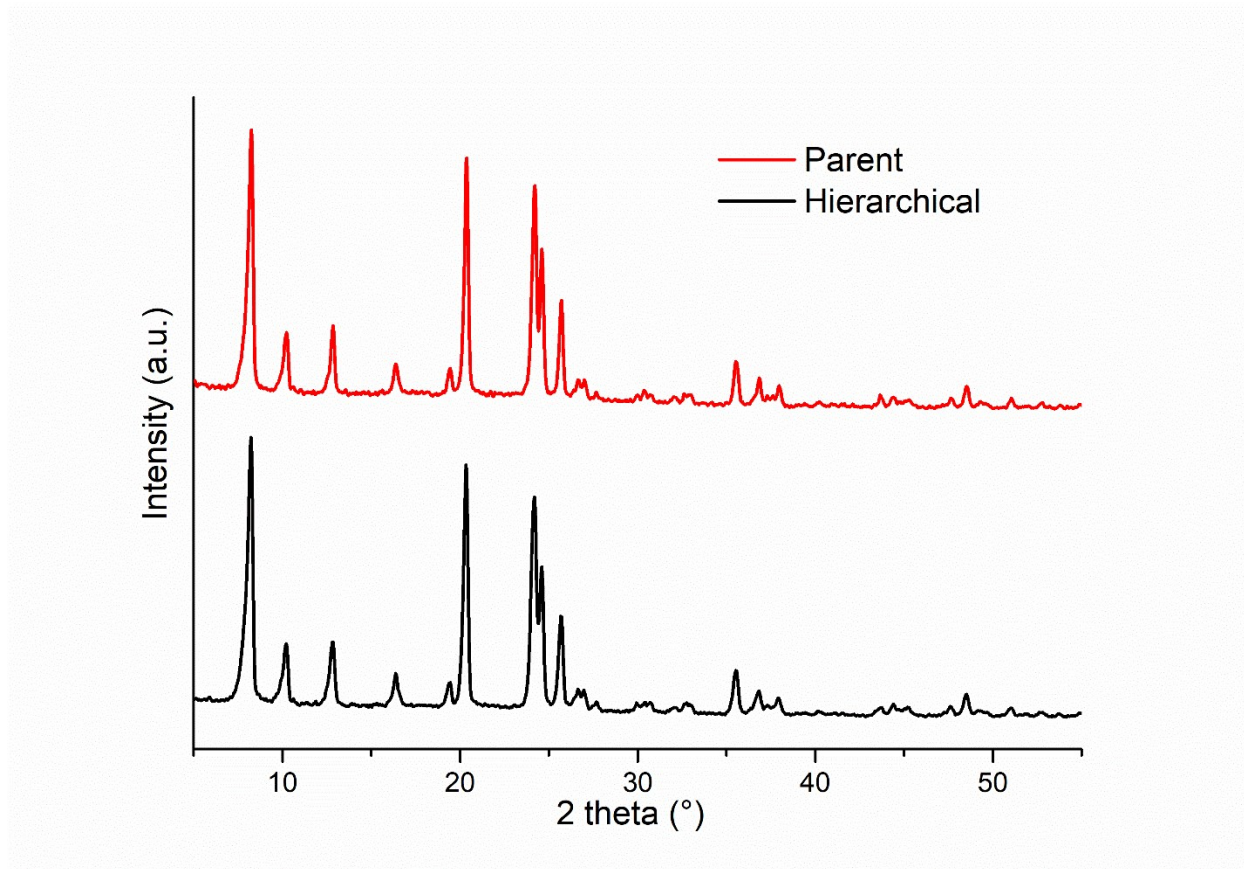


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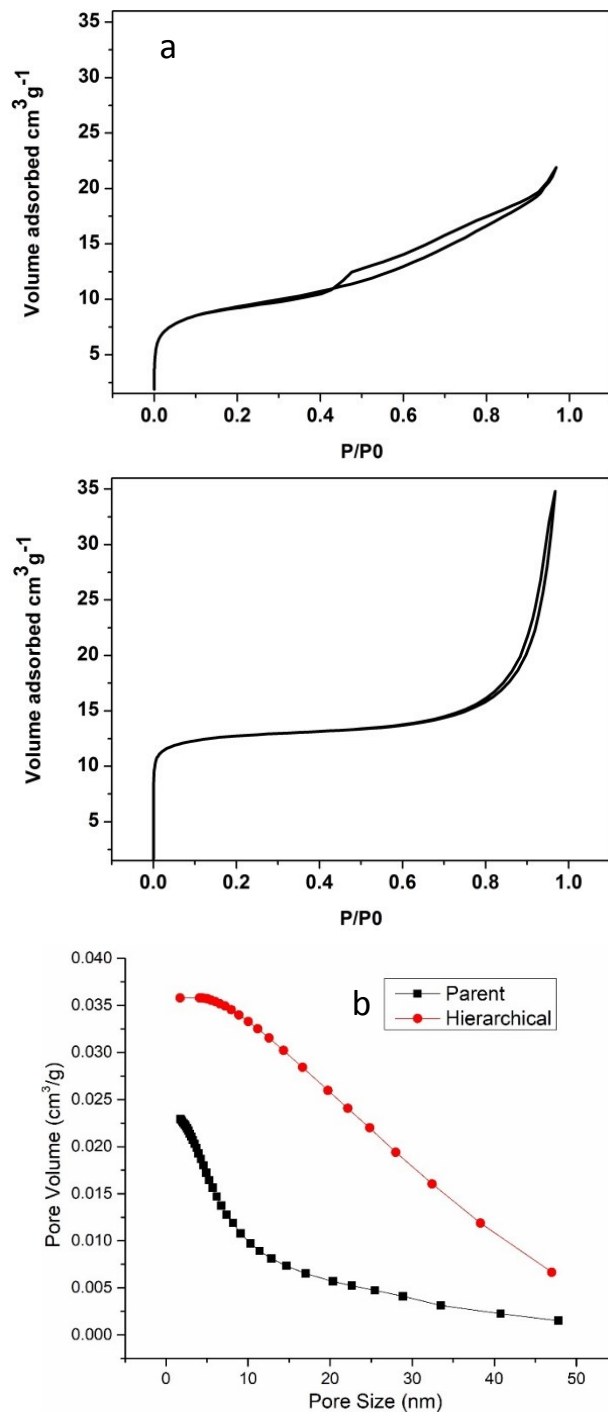


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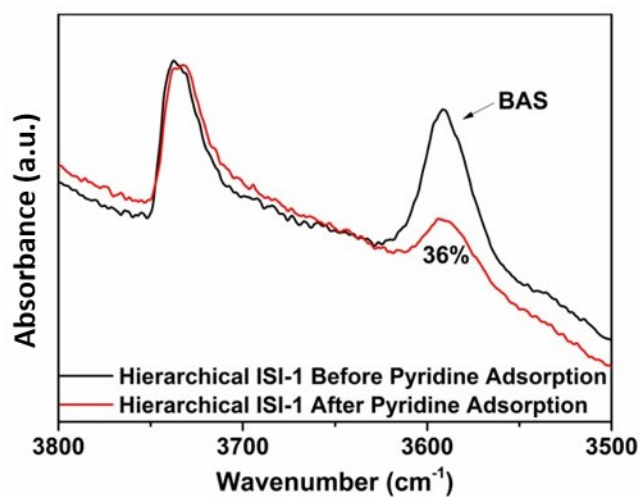
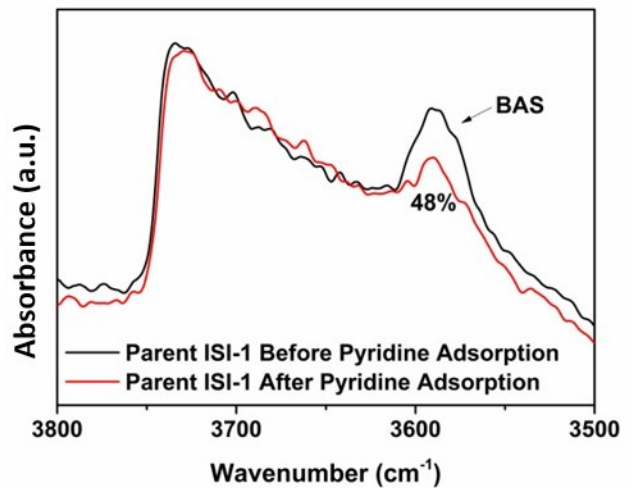


Fig S3. Comparison of Brønsted acid site peak (ca. 3600 cm^{-1}) of parent (top) and hierarchical ISI-1 (bottom) before and after adsorption of pyridine at 200°C .

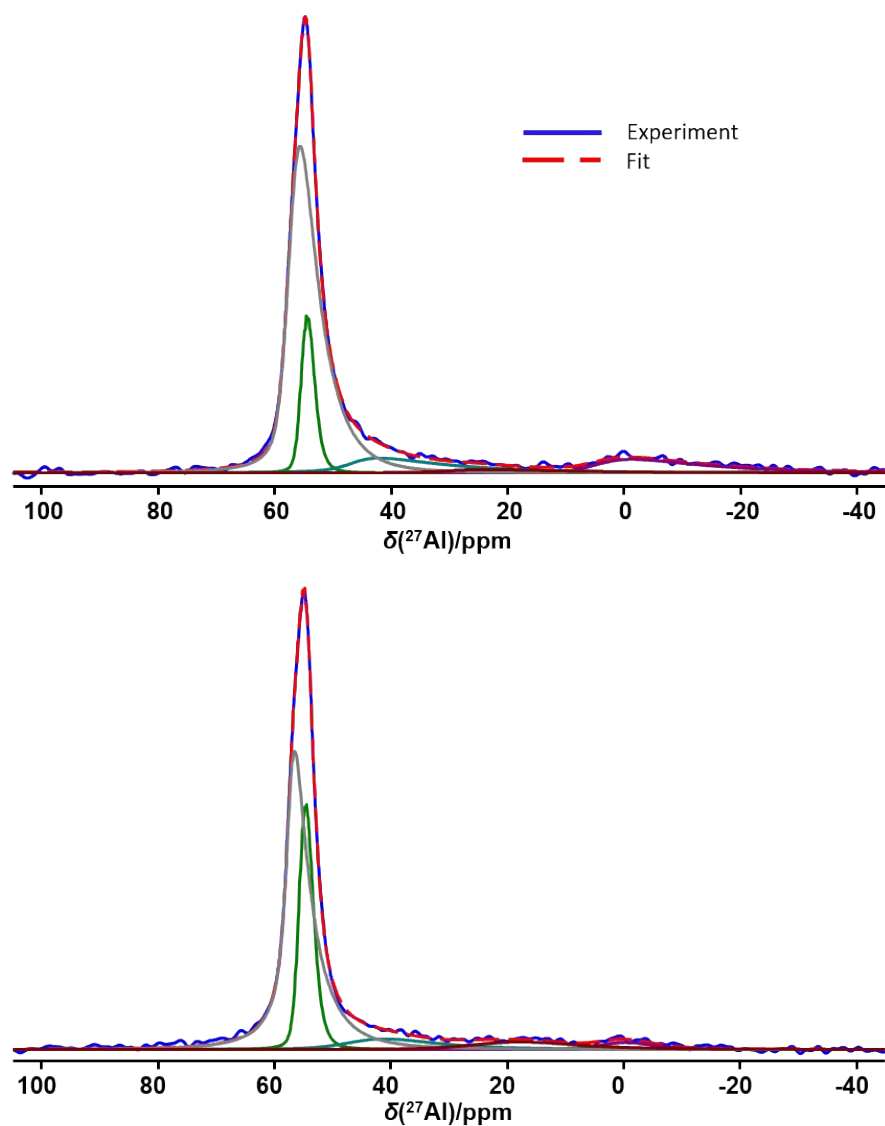


Figure S4. Spectral decomposition of ^{27}Al NMR of parent (top) and desilicated ISI-1 zeolites showing the different spectral components. Experimental spectra is given by blue trace and sum of the individual components is given by the red dotted trace.

Table S1. Listed are the different spectral components of the ^{27}Al NMR spectrum of the parent and desilicated ISI-1 zeolites and their respective assignments.

ISI-1 Parent				ISI-1 desilicated				Assignment
pos(ppm)	CQ (MHz)	dCS(ppm)	%	pos(ppm)	CQ (MHz)	dCS(ppm)	%	
57.4	2.9	2.9	66.9	57.4	2.3	1.6	60.4	Tetra coordinated
55.1	1.5	2.0	12.8	55.3	1.5	2.1	23.9	Tetra coordinated
47.0	5.6	5.0	9.7	46.1	4.6	10.0	7.2	Distorted tetra coordinated
30.2	6.3	6.3	2.0	23.7	4.7	13.9	6.0	Penta coordinated
5.8	5.6	8.1	8.7	3.0	3.2	8.1	2.5	Hexa coordinated