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Electronic Supporting Information (ESI)

Architecting ordered mesoporous aluminosilicates under acidic condition *via* intrinsic hydrolysis method

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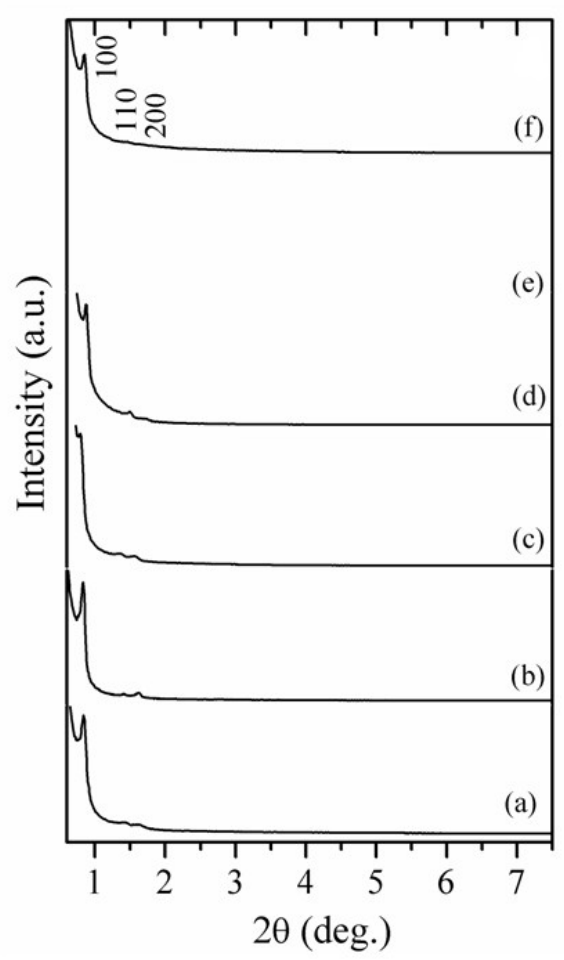

Fig. S1 XRD patterns of as-synthesized: (a) SBA-15(D); (b) H-AlSBA-15(I); (c) H-AlSBA-15(D); (d) H-AlSBA-15(P); (e) H-AlSBA-15(G); (f) H-AlSBA-15(H).

Table S1 Acidity data of H-AlSBA-15 synthesized *via* various preparation methods.

Material	Method	n_{Si}/n_{Al}[a]		n_{Si}/n_{Alr}[b]	h_w (*nm*)	Acidic sites (*mmol* g^{-1}) / T_{Des} (°*C*)		
		gel	product			Total	(iii)	(iv)
SBA-15	D	∝	∝	∝	3.80	0.06	---	---
H-AlSBA-15	I	60	140	140	4.95	0.18	0.10 / 327	0.04 / 387
	D	60	125	157	4.06	0.16	0.06/314	0.02/382
	P	60	103	151	3.44	0.17	0.06/307	0.02/379
	G	60[c]	100	147	4.62	0.20	0.08/309	0.03/384
	H	60	107	153	4.15	0.16	0.07/307	0.02/382

[a] Determined by XRF.
[b] Determined by ^{27}Al MAS-NMR.
[c] Post-synthesis grafting of SBA-15 with appropriate aluminium source.

Table S2 Acidity data of H-AlIITM-56 synthesized by intrinsic hydrolysis method.

Material	n_{Si}/n_{Al}[a]		n_{Si}/n_{Alr}[b]	h_w (*nm*)	Acidic sites (*mmol* g^{-1}) / T_{Des} (°*C*)		
	gel	product			Total	(iii)	(iv)
IITM-56	∝	∝	∝	2.48	0.06	--	--
H-AlIITM-56	90	240	240	2.45	0.09	0.05/291	0.01/358
	60	144	144	2.57	0.12	0.06/292	0.01/361
	30	80	80	2.66	0.22	0.09/297	0.02/365

[a] Determined by XRF; [b] Determined by ^{27}Al MAS-NMR.

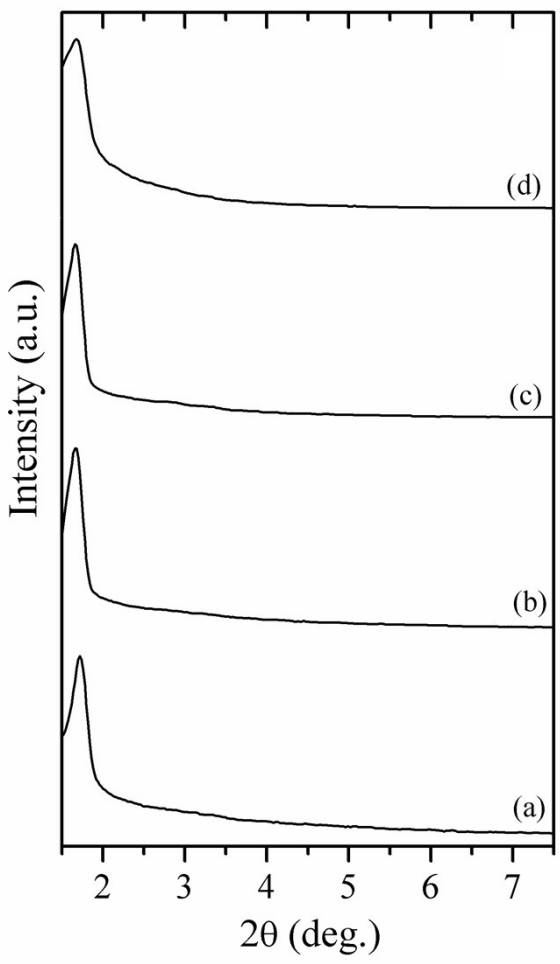

Fig. S2 XRD patterns of synthesized: (a) IITM-56; (b) H-AlIITM-56(90); (c) H-AlIITM-56(60); (d) H-AlIITM-56(30).