Supporting Information of

The Synthesis and Properties of MFI Zeolites with Microporous, Mesoporous and Macroporous Hierarchical structures by a Gel-casting Technique

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Further Characterisation Information.

DTA and TG

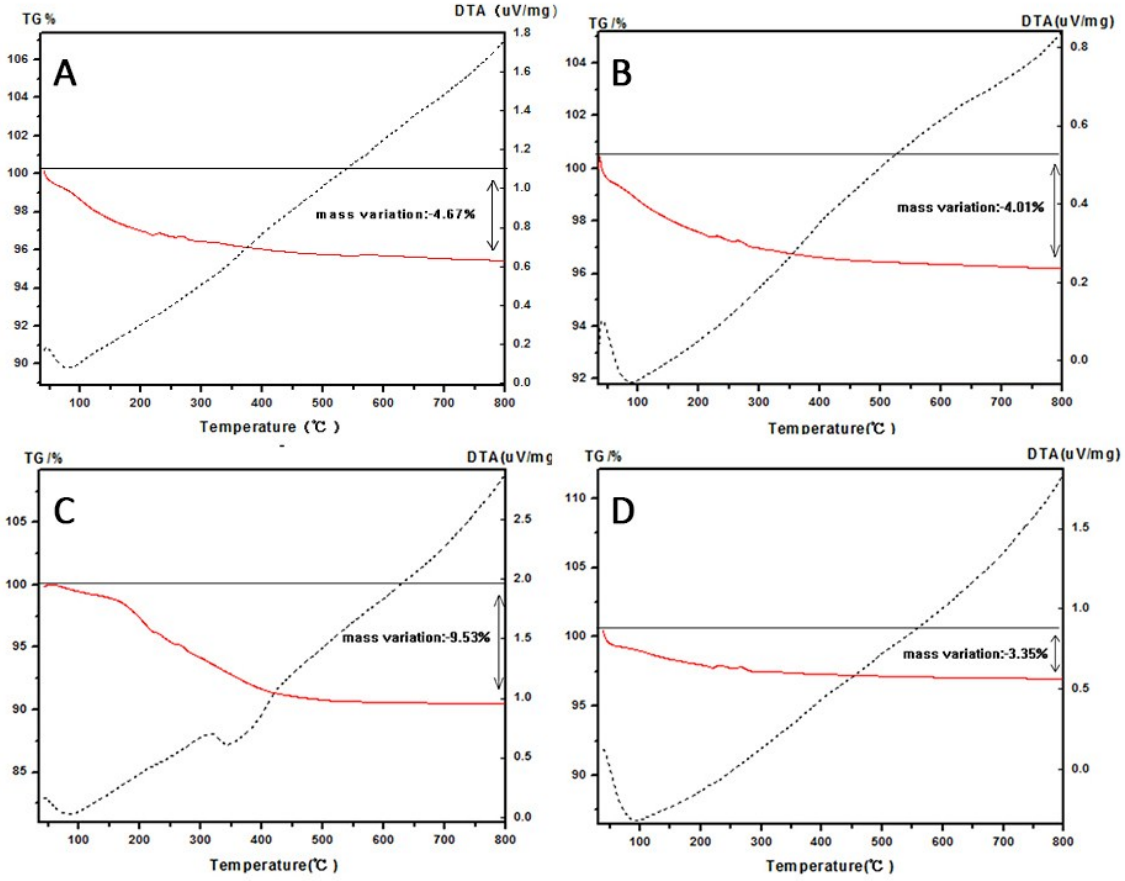

Figure.S1. TG-DTA curves of (A) ZSM-5, (B) A-ZSM-5, (C) G-ZSM-5and (D) calcined G-ZSM-5.

Catalytic cracking reactions of 1,3,5- triisopropylbenzene

Table 1S: Catalytic Activities in Cracking of 1, 3, 5-Triisopropylbenzene on Various Catalysts[a].

Catalyst	Conversion%	Reaction temperature	Selectivity,%					
			Propylene	Benzene	IPB	MIPB	PIPB	others
HZSM-5	25.9	400	29.8	15.6	10.8	31.3		12.5
HZSM-5	1.7	250						
Beta	2.7	250				100		
Beta	7.5	300			11.7	75	13.3	
Beta	10.2	350		5.2	13.5	69.6	11.7	
MCM-41	62.5	400	36.4	13.2	22.6	16.1	4.9	6.8
G-ZSM-5	60	320	56.9	13.6	0.5	29		
G-ZSM-5	26.7	250	48.7	8.2	1.3	41.9		
G-ZSM-5	13.7	200	31.5	6.4	7.8	54.3		

[a] The data of HZSM-5 and MCM-41 was from Qi Jian[46], performed under the following condition: the volume of 1, 3, 5-TIPB was 1.0 μL and the catalysts dosages were 60 mg. In comparison to that, Our data condition is that the volume of 1, 3, 5-TIPB was 0.4 μL and the catalysts dosages were 50 mg， and the Beta was from Li Jun-Hua[47].

Note: IPB, MIPB, and PIPB denote isopropylbenzene, m-diisopropylbenzene, and p-diisopropylbenzene, respectively.

Catalytic cracking reactions of Hexane

Table 2S: Catalytic Activities in Cracking of Hexane on Various Catalysts.

Catalyst	Conversion%	Reaction temperature
HZSM-5	2.2	400
MCM-41	0	400
G-ZSM-5	5.33	400