

Supplementary Information

Hydrothermal Synthesis of Nanosized Sn-Beta Zeolites by Interzeolite Transformation for Glucose Isomerization

*Jiaying Zhang,^a Haoyi Lin,^a Guojun Lv,^{*b} Weiping Liao,^a Hongying Lü,^a
Zhiguo Zhu^{*a} and Kaixuan Yang^{*a}*

¹ Department College of Chemistry and Chemical Engineering, Yantai University, 32
Qingquan Road, Yantai 264005, China

² School of Environmental and Chemical Engineering, Jiangsu University of Science
and Technology, Zhenjiang 212003, Jiangsu, China

*Correspondence: jkdlgj@just.edu.cn; zhuzg@ytu.edu.cn;

yangkaixuanyt@ytu.edu.cn

Table S1. Physicochemical properties of Sn based catalysts.

No.	Sample	Si/Sn ^a	S _{BET} ^b (m ² g ⁻¹)	Pore volume (cm ³ g ⁻¹)		
				V _{total} ^c	V _{micro} ^d	V _{meso} ^e
1	Sn-Beta-100	102	530	0.41	0.16	0.25
2	Sn-Beta-F	108	505	0.27	0.19	0.08
3	Sn-Beta-PS	105	518	0.34	0.18	0.16

^aAnalyzed by ICP technique.^bS_{BET}, specific surface area, estimated by BET method.^cV_{total}, total pore volume, determined from the adsorption capacity at P/P₀ = 0.95.^dV_{micro}, microporous volume, calculated by t-plot method.^eV_{meso}, mesoporous volume, V_{meso} = V_{total} – V_{micro}.

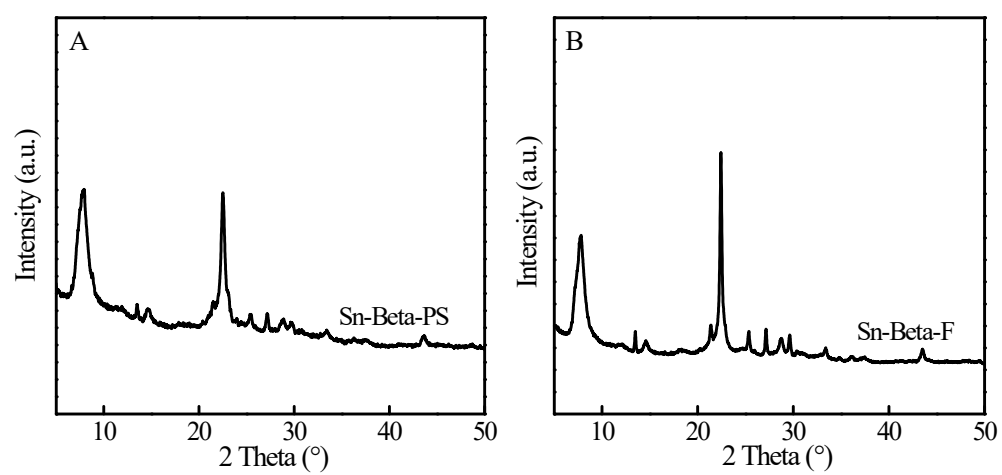


Fig. S1 XRD patterns of Sn-Beta-PS and Sn-Beta-F samples.

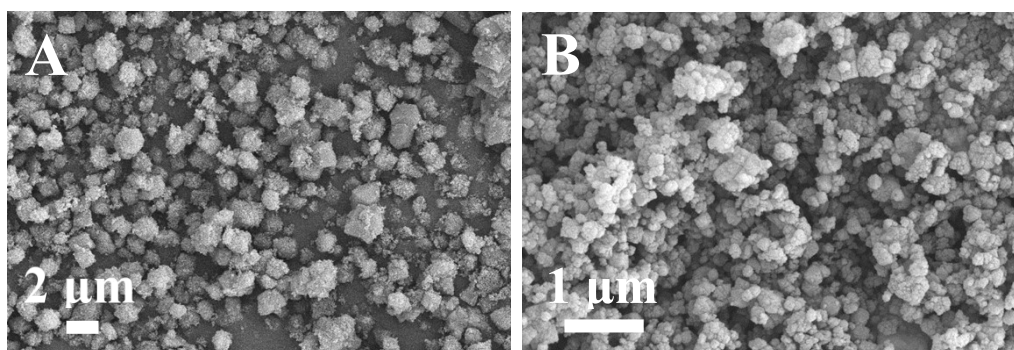


Fig. S2 SEM images of (A) Sn-Beta- F and (B) Sn-Beta-PS samples.

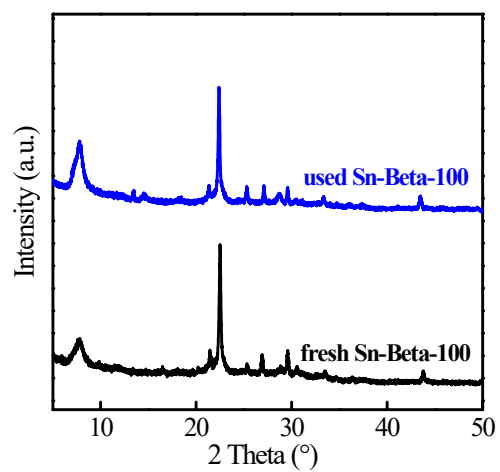


Fig. S3 XRD patterns of fresh and used Sn-Beta-100 samples.