SUPPORTING INFORMATION

Surface Amino-Functionalization of Sn-Beta Zeolite Catalyst for Lactic Acid Production from Glucose

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Supporting figures

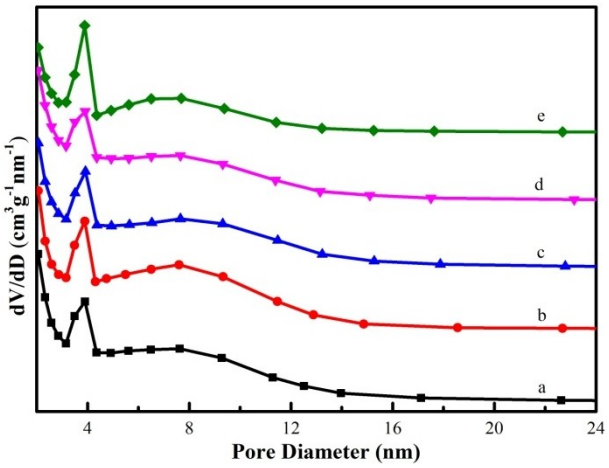

Fig.S1 BJH pore size distribution curves of the samples. The samples are: (a) Beta, (b) deal-Beta, (c) Sn-Beta, (d) Sn-Beta-$NH_{2(30)}$ and (e) Sn-Beta-$NH_{2(200)}$.

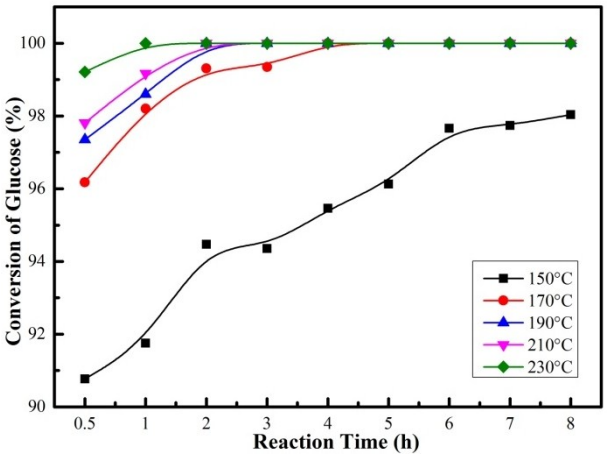

Fig.S2 Effect of reaction temperature and reaction time on conversion of glucose over Sn-Beta-$NH_{2(30)}$ catalyst. Reaction conditions: 225 mg of glucose, 160 mg of catalyst, 10 mL of H_2O.

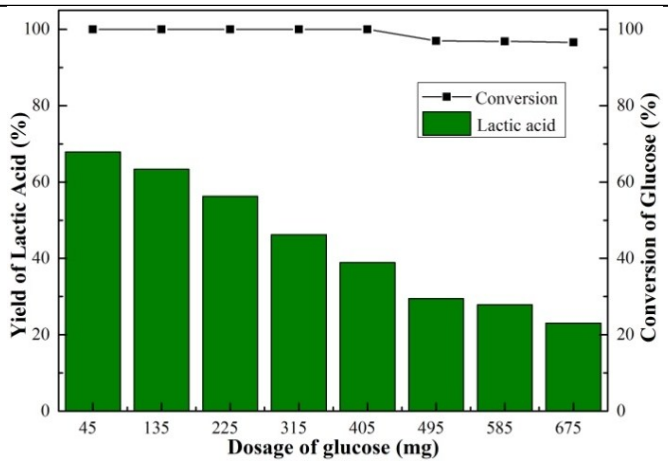

Fig.S3 Effect of glucose dosage on yield of LA over Sn-Beta-$NH_{2(30)}$ catalyst. Reaction conditions: 160 mg of catalyst, 10 mL of H_2O, 190°C, 2 h

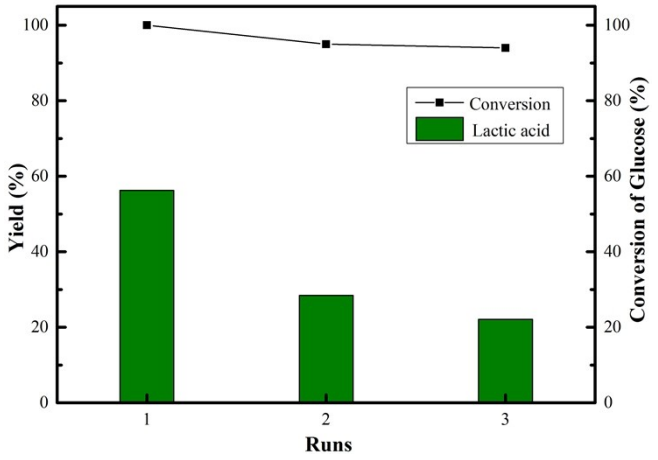

Fig.S4 Recyclability tests of Sn-Beta-$NH_{2(30)}$ catalysts on conversion of glucose. Reaction conditions: 225 mg of glucose, 160 mg of catalyst, 10 mL of H_2O.

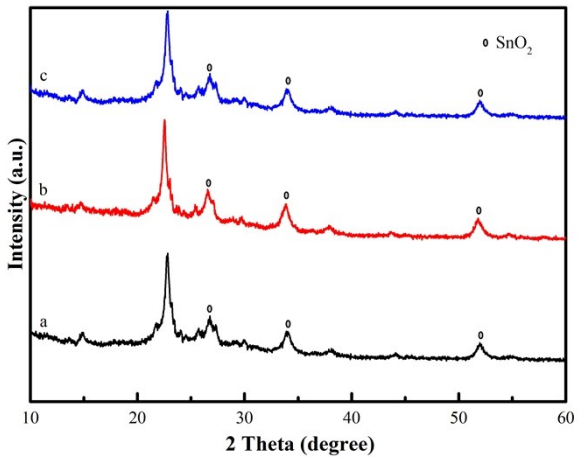

Fig.S5 Powder XRD patterns of (a) Sn-Beta-$NH_{2(30)}$-1 run, (b) Sn-Beta-$NH_{2(30)}$-2 runs, (c) Sn-Beta-$NH_{2(30)}$-3 runs.

Table S1 The C and N contents of reusing Sn-Beta-$NH_{2(30)}$ catalysts

Runs	C	N
	wt%	wt%
1	2	0.2
2	8	0.1
3	9	0.1

Determined by CHN elemental analysis.