

Supplementary Materials

Catalytic production of 1,2-propanediol from sucrose over functionalized Pt/deAl-Beta zeolite catalyst

Shizhuo Wang^a, Jikang Jiang^a, Minyan Gu^a, Zheng Shen*^a

^a State Key Laboratory of Pollution Control and Resources Reuse, Key Laboratory of Yangtze River Water Environment of MOE, Tongji University, Shanghai, 200092, China

*E-mail: shenzheng@tongji.edu.cn, Tel/Fax: 86-21-65985811.

The supplementary Figures and Tables



Fig.S1 High-pressure hydrothermal reactor.

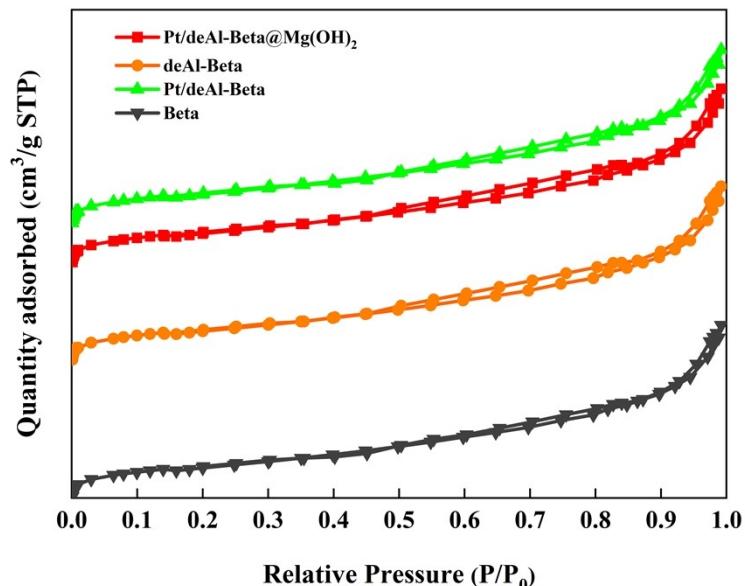


Fig.S2 The Nitrogen adsorption-desorption isotherms of different catalysts.

Table S1 The acid sites of Pt/deAl-Beta and Pt/deAl-Beta@Mg(OH)₂ catalysts

catalyst	Temperature °C	B acidity ^a m mol/g	L acidity ^b m mol/g	total acidity m mol/g	B acidity proportion %
Pt/deAl-Beta	150	0.02	0.43	0.45	4.44
	250	0.01	0.28	0.28	3.45
	350	0.00	0.04	0.04	0.00
	450	0.00	0.02	0.02	0.00
Pt/deAl-Beta@5Mg(OH) ₂ ^c	150	0.01	0.14	0.15	5.63
	250	0.00	0.03	0.03	0
	350	0.00	0.03	0.03	0
	450	0.00	0.02	0.02	0
Pt/deAl-Beta@7.5Mg(OH) ₂ ^c	150	0.02	0.38	0.40	5.00
	250	0.01	0.21	0.22	4.55
	350	0.00	0.08	0.08	0.00
	450	0.00	0.02	0.02	0.00

^a The B acidity represents Brønsted acidity. ^b The L represents Lewis acidity. ^c The Pt loading of the catalyst is 3.0 wt %, and the number represents the mass fraction of the load.