

Electronic Supplementary Information

Table S1 The reuse of the 5Pd-5Re/SBA-15 in glycerol hydrogenolysis

Cat.	Condition	Conv.(%)	Select.(%)				
			C _{1~2}	1-PO	2-PO	1,2-PD	1,3-PD
5Pd-5Re/SBA-15	Fresh(H ₂ -250)	40.7	5.2	24.6	2.1	59.9	8.2
5Pd-5Re/SBA-15	Spent	9.3	2.9	21.6	1.3	62.5	11.8
5Pd-5Re/SBA-15	Spent*	28.8	6.5	19.9	3.0	60.8	9.8

Reaction conditions: 0.15 g Pd catalyst, 40% Glycerol aqueous 10 mL, 200 °C, 8 MPa H₂, 18 h, 700 rpm.

*: spent catalyst calcined at 500 °C following by reduced at 250 °C.

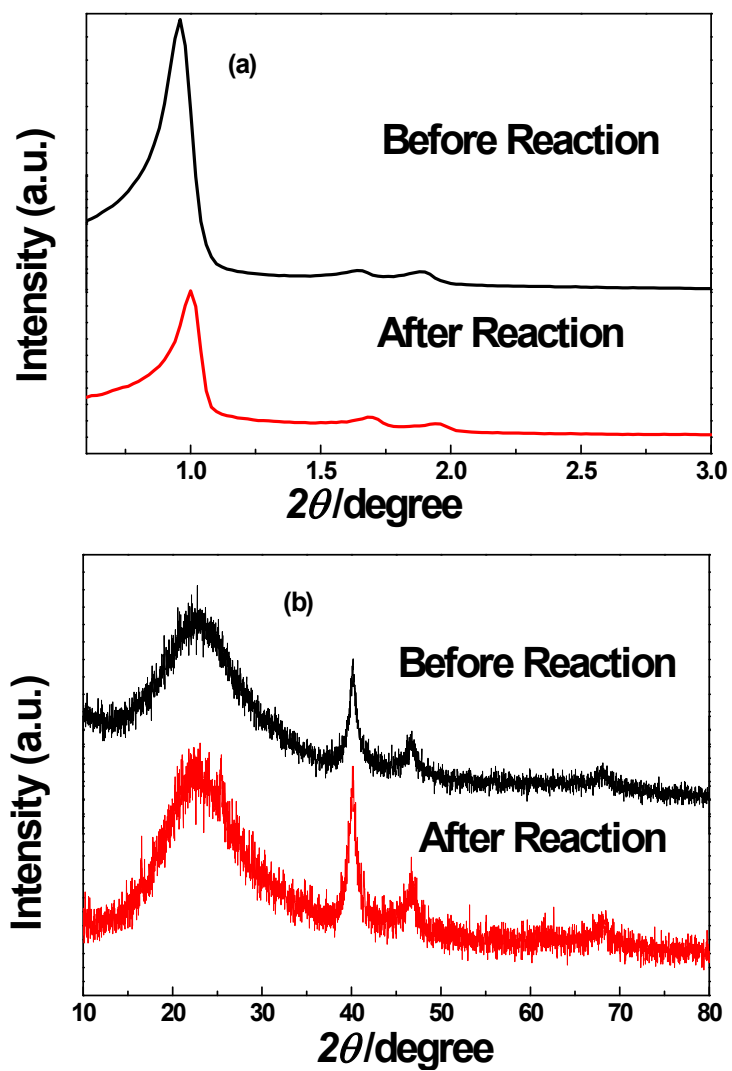


Fig. S1 XRD patterns of 5Pd-5Re/SBA-15 after reaction (a) small angle XRD (b) wide angle XRD

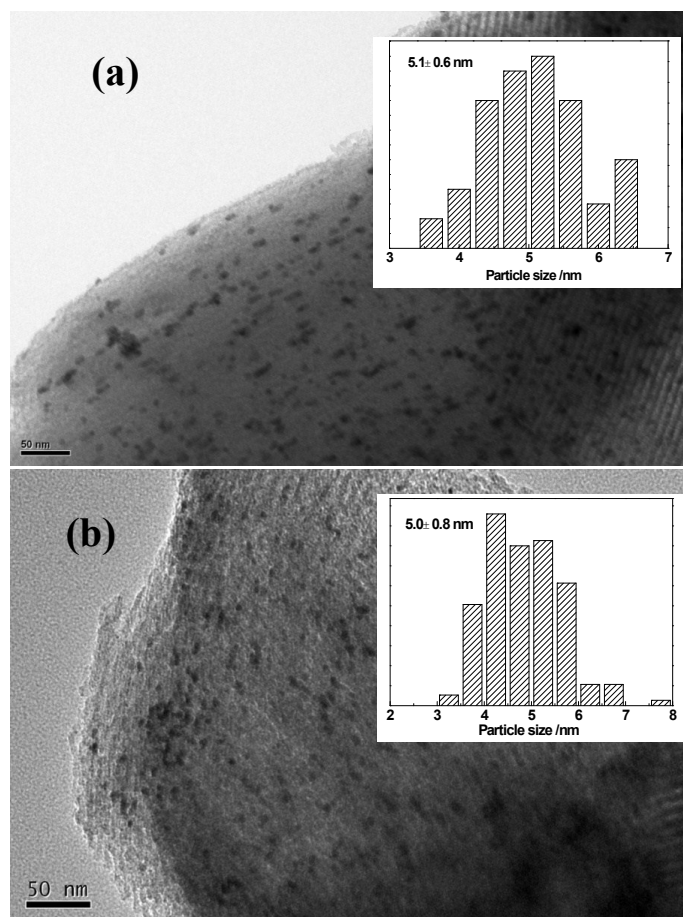


Fig. S2 TEM images of 5Pd-5Re/SBA-15 catalyst (a) Fresh (b) Spent

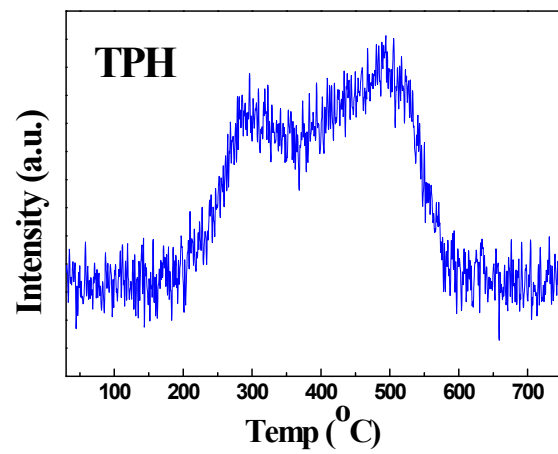


Fig. S3 TPH profile of spent 5Pd-5Re/SBA-15

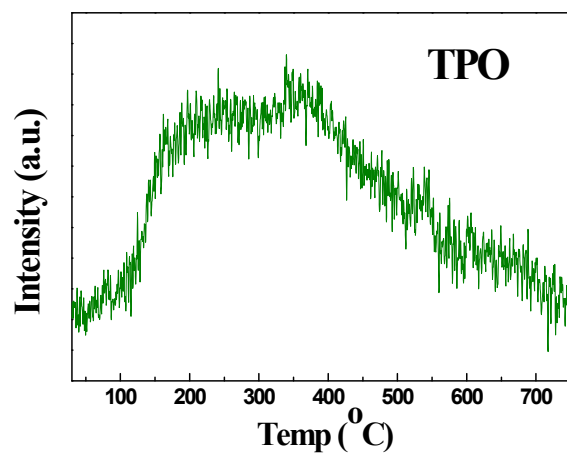


Fig. S4 TPO profile of spent 5Pd-5Re/SBA-15