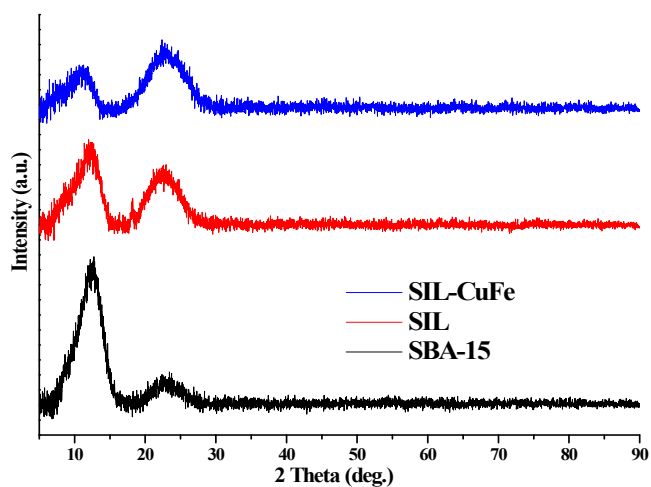
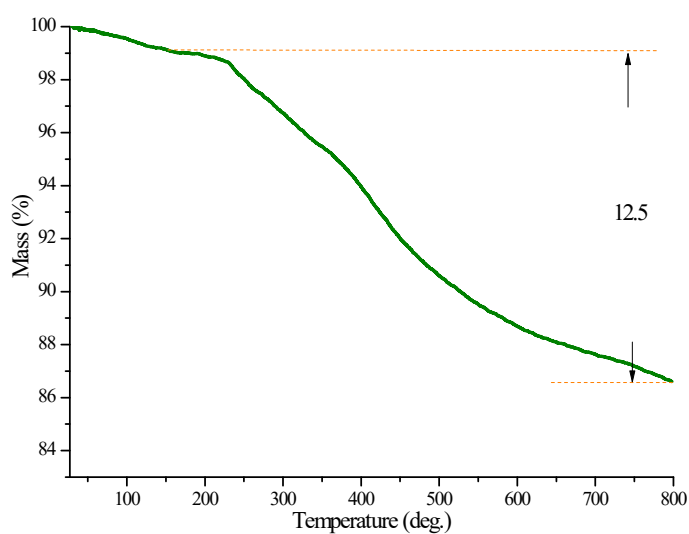


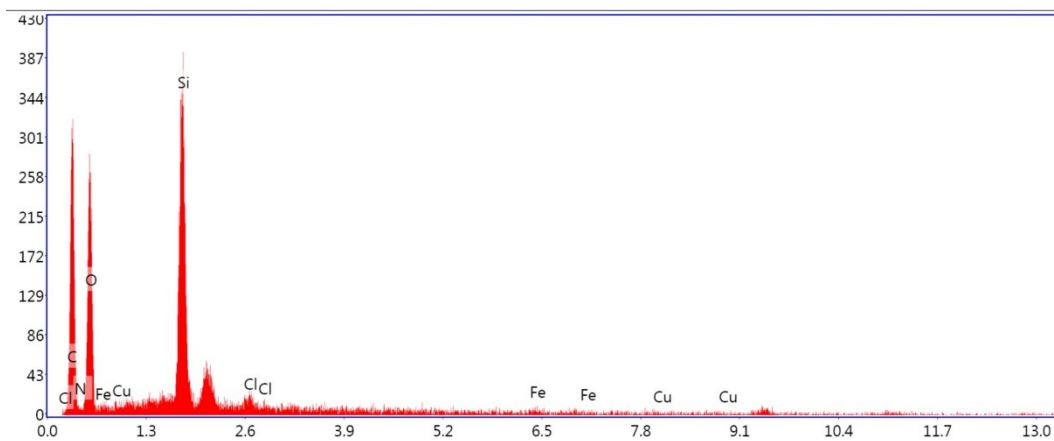
## Supporting information



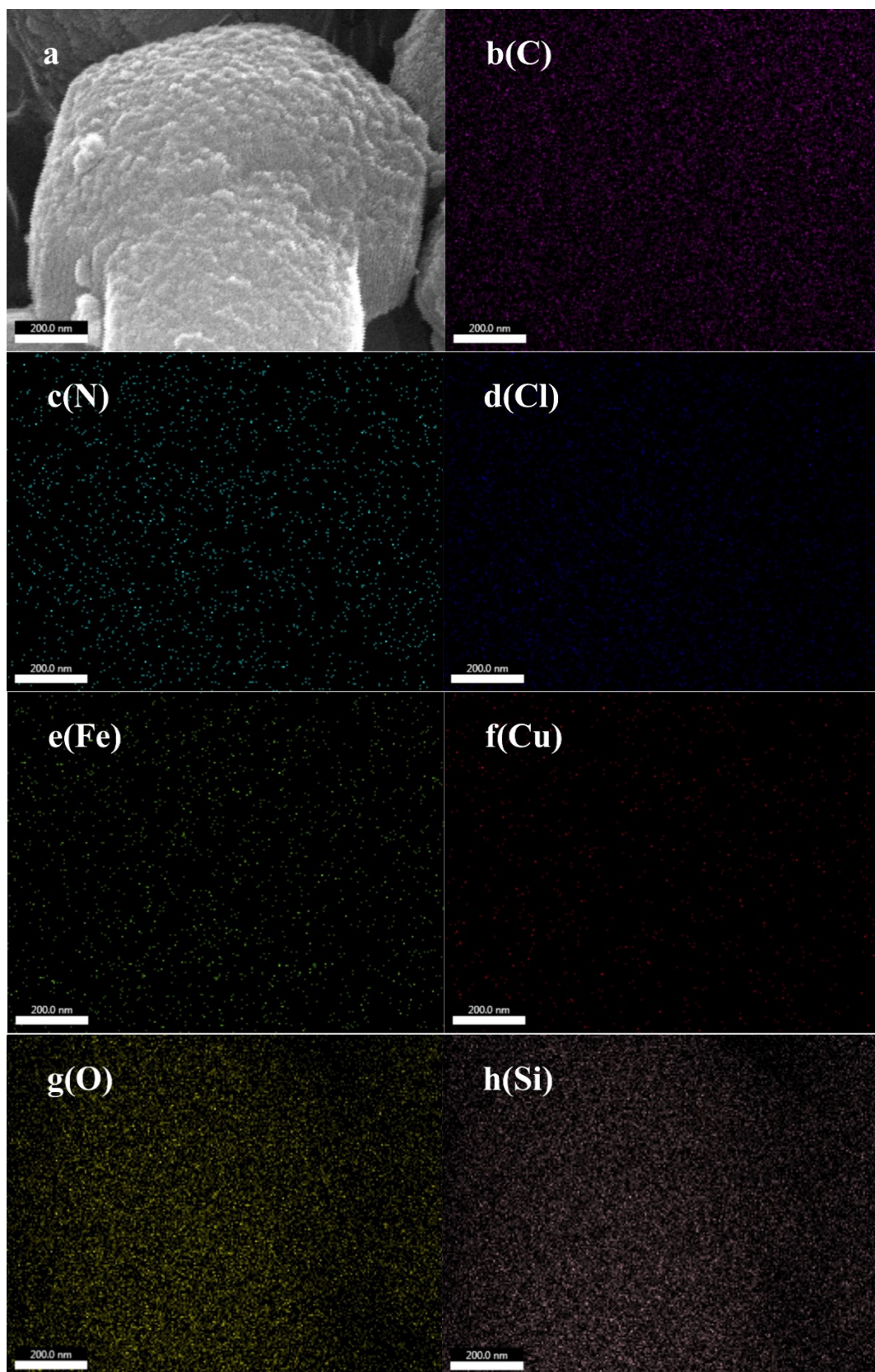
**Fig. S1** Wide-angle XRD patterns of SBA-15, SIL and SIL-CuFe



**Fig. S2** TG curve of SIL-CuFe sample



**Fig. S3** EDX spectrum of SIL-CuFe



**Fig. S4** Elemental mapping of SIL-CuFe

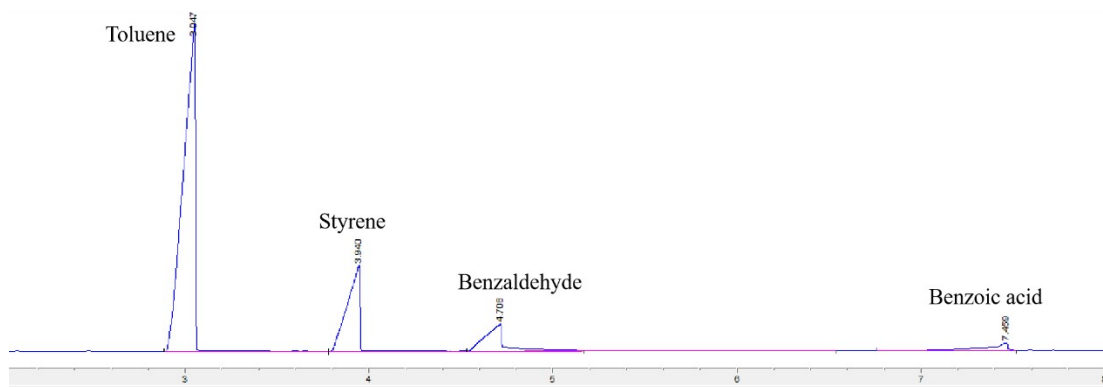
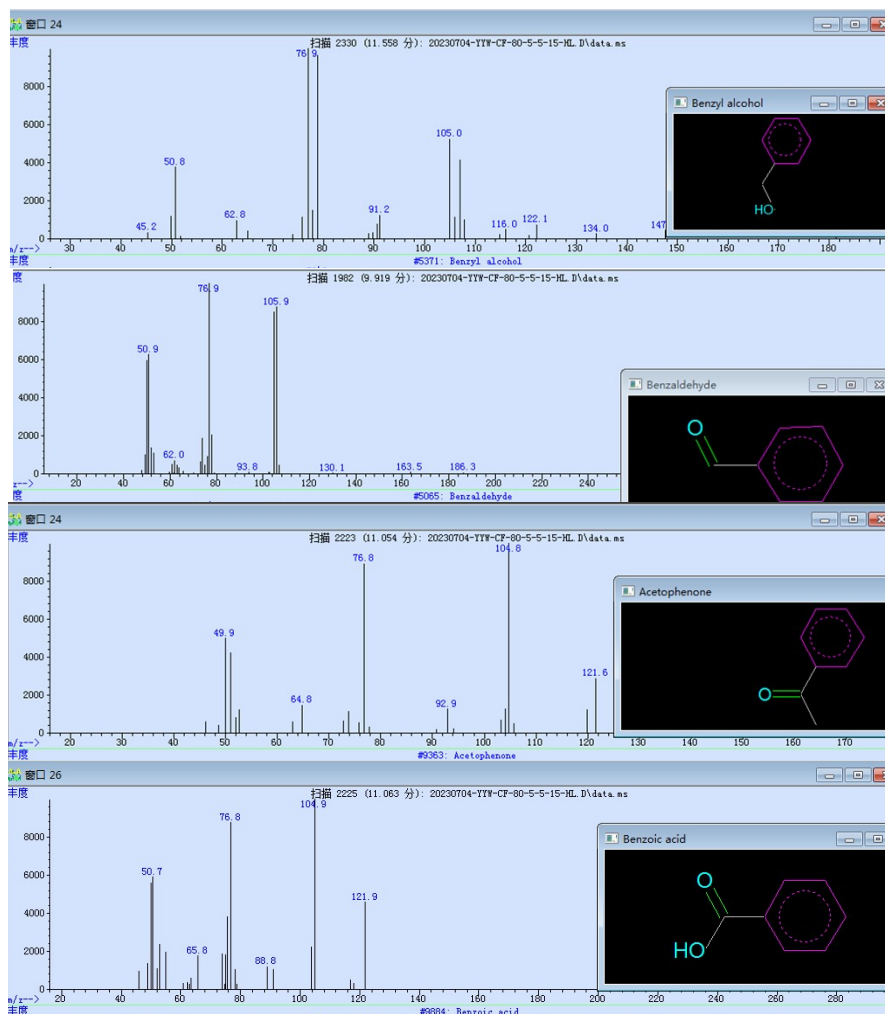


Fig. S5 GC and MS chromatograms of the products

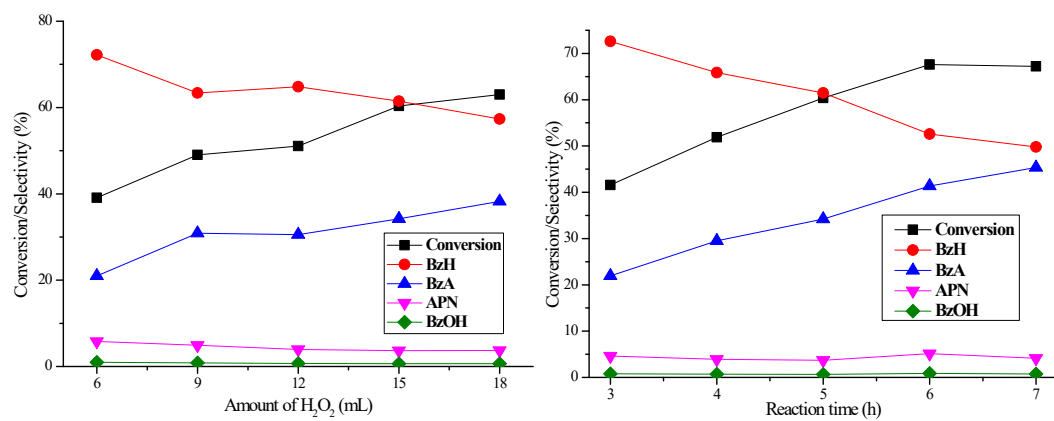


Fig. S6 catalytic performance versus amount of H<sub>2</sub>O<sub>2</sub> and reaction time at 80 °C

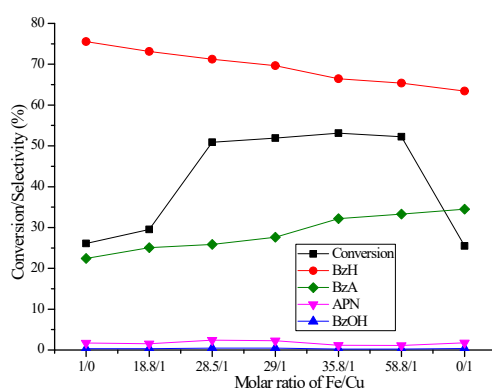
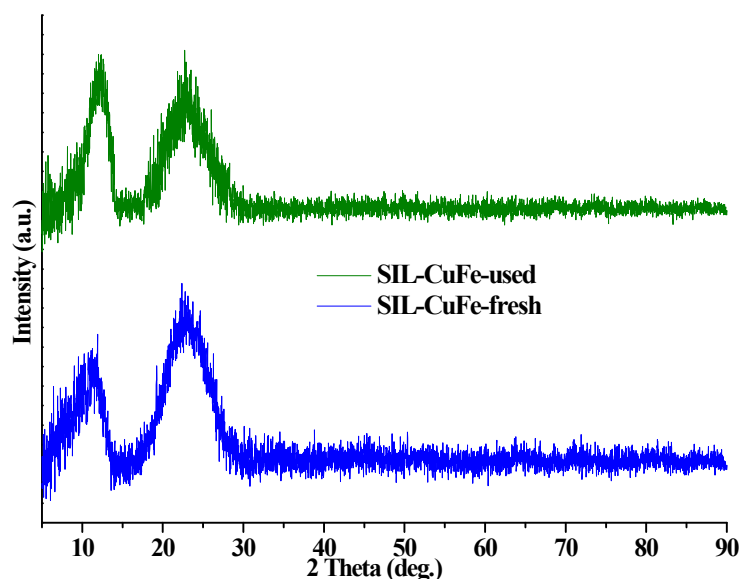
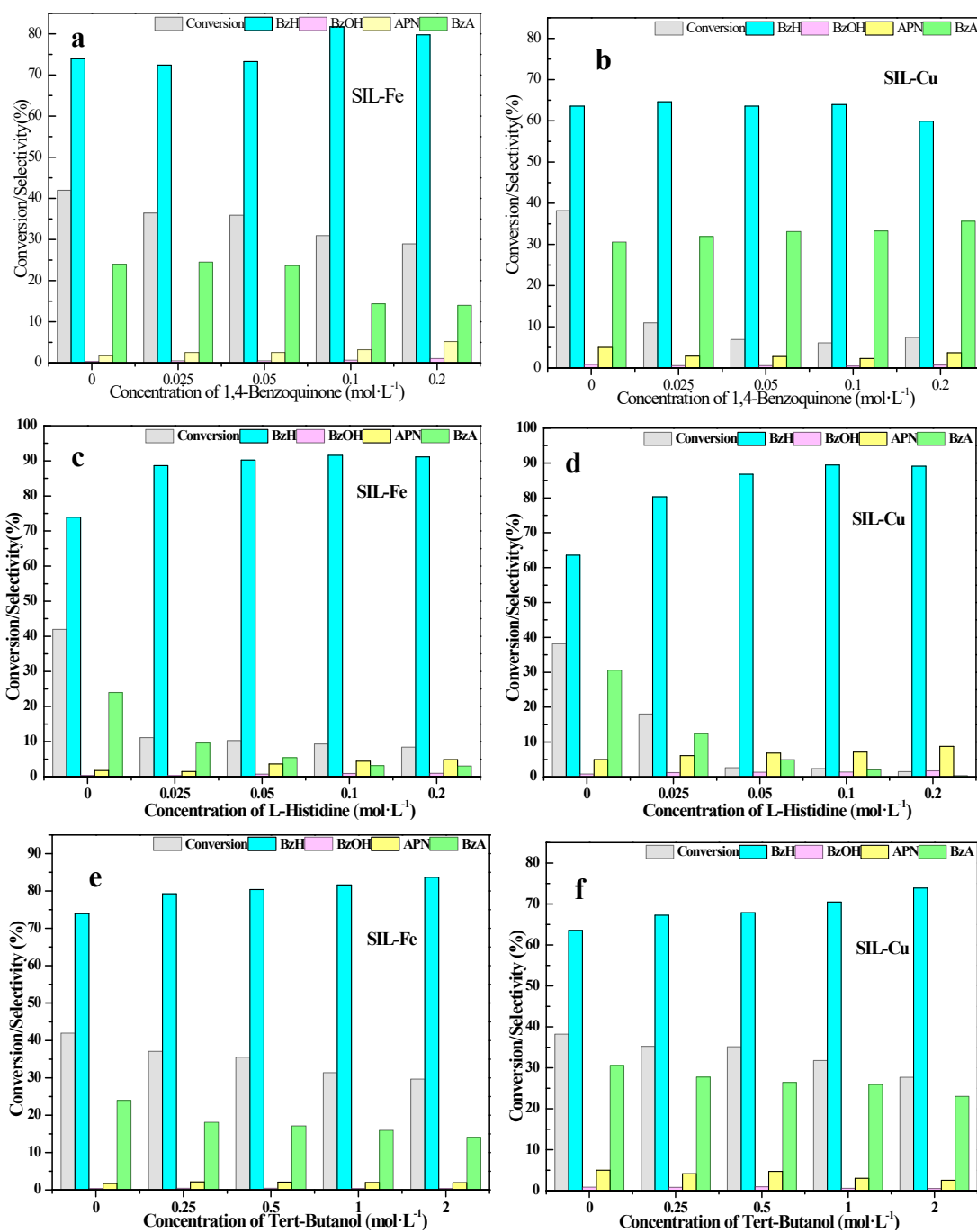


Fig. S7 catalytic performance versus molar ratio of Fe/Cu at 70 °C



**Fig. S8** wide-angle XRD patterns of fresh and used catalyst



**Fig. S9** quenching experiments of SIL-Fe (a,c,e) and SIL-Cu (b,d,f)

**Table S1** The results of ICP method

Elements	Conc (ppm )	Content of metals (mmol/g)	Fe:Cu
Fe	0.563	0.102	18.8/1
Cu	0.034	0.005	
Fe	1.583	0.285	28.5/1
Cu	0.0632	0.010	
Fe	0.484	0.087	29.1/1
Cu	0.019	0.003	
Fe	1.529	0.276	35.8/1
Cu	0.049	0.008	
Fe	1.239	0.223	58.7/1
Cu	0.024	0.004	