

Electronic Supplementary Information

Primary and Tertiary Amines Bifunctional Graphene oxide for Cooperative Catalysis

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Control experiment: The mixture containing GO (100 mg), primary amines (0.1333 g), tertiary amines (0.1873 g), ethanol (50 mL) was intensively stirred at room temperatures for 24 h (no silylanization reaction should occur under this condition). Then, the liquid portion was removed by filtration, and the solid portion was purified by washing with ethanol and deionized water, respectively. The sample was then dried and characterized by XPS analysis. The result is as followed.

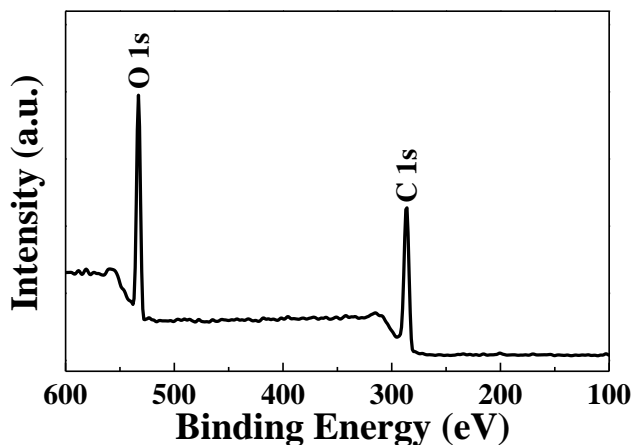


Fig. S1 XPS spectra of mixture containing GO, NH₂, NEt₂.

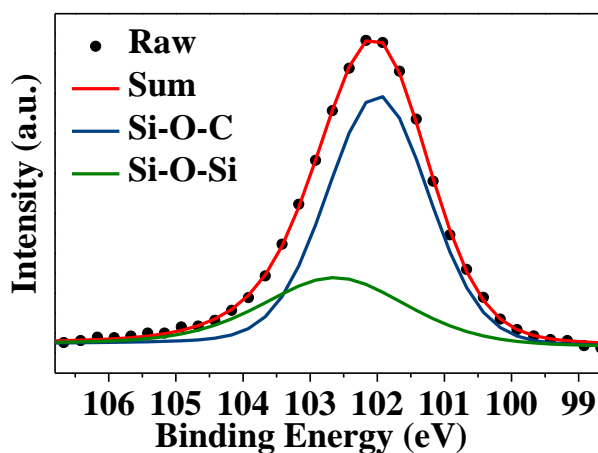


Fig. S2 Si 2p XPS spectrum of GO-NH₂-NEt₂.

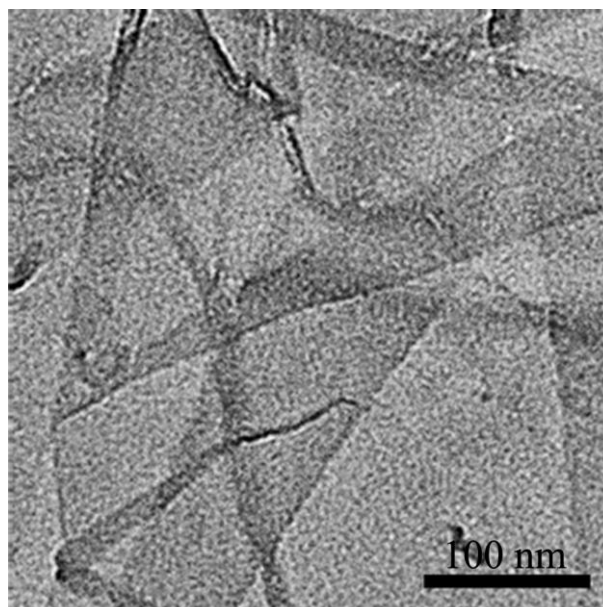


Fig. S3 HRTEM image of GO-NH₂-NEt₂.

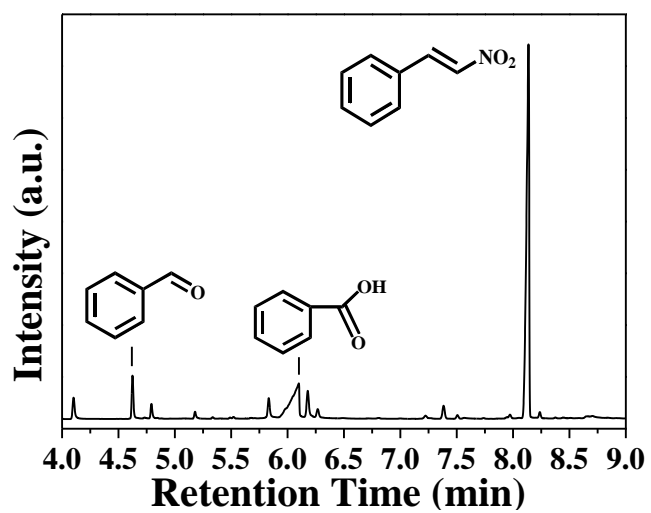


Fig. S4 GC results catalyzed by NH₂.

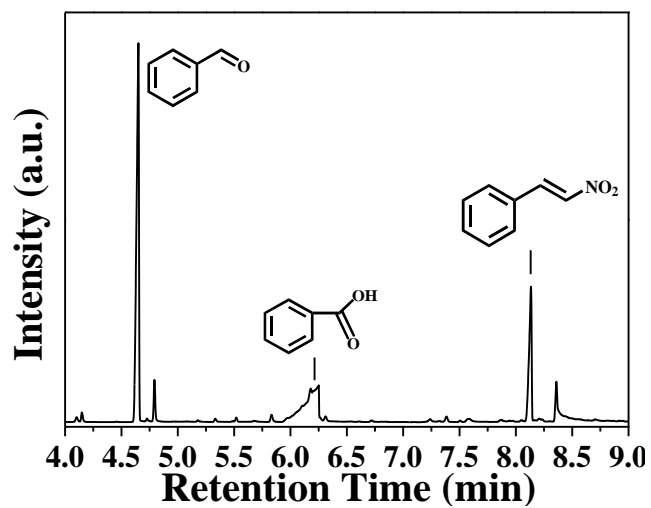


Fig. S5 GC results catalyzed by NEt_2 .

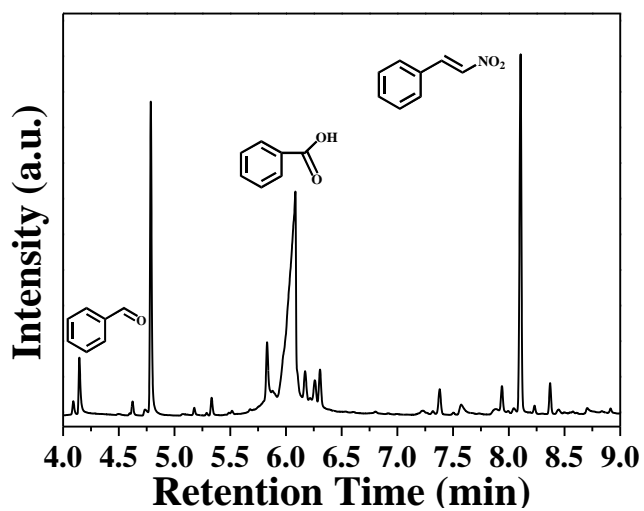


Fig. S6 GC results catalyzed by $\text{NH}_2 + \text{NEt}_2$.