Hydrogenation of 3-nitro-4-methoxy-acetylaniline with H_2 to 3-amino-4-methoxy-acetylaniline catalyzed by bimetallic copper/nickel nanoparticles

Chenchen Yang, Wuping Xue, Hengbo Yin*, Zhipeng Lu, Aili Wang*, Lingqin Shen, Yunyan Jiang

New Journal of Chemistry

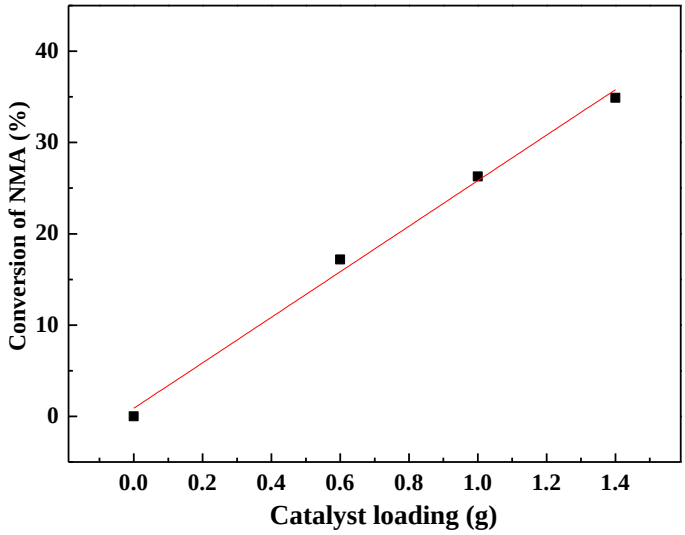

Fig. S1. Effect of catalyst loading on the conversion of NMA. Reaction conditions: NMA methanol solution, 150 mL, 0.2 mol/L; H_2 pressure, 0.8 MPa; reaction temperature, 140 ºC; reaction time, 0.5 h; $Cu_{0.7}Ni_{0.3}$ nanoparticles, 0, 0.6, 1.0, and 1.4 g; and stirring rate, 400 rpm.

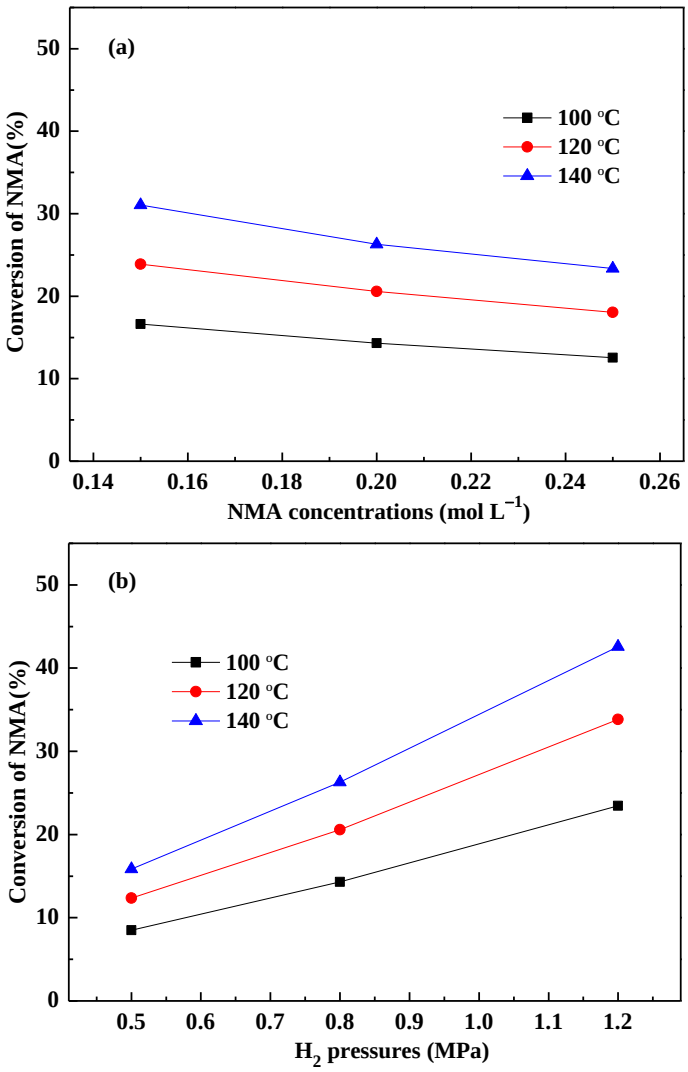

Fig. S2. The conversions of NMA in the catalytic hydrogenation of NMA under different initial NMA concentrations or different H_2 pressures catalyzed by the bimetallic $Cu_{0.7}Ni_{0.3}$ catalyst. (a) Reaction conditions: NMA methanol solution, 150 mL; H_2 pressure, 0.8 MPa; reaction time, 0.5 h; catalyst loading, 1.0 g; and stirring rate, 400 rpm. (b) NMA methanol solution, 150 mL, 0.2 mol/L; reaction time, 0.5 h; catalyst loading, 1.0 g; and stirring rate, 400 rpm.