Electronic Supplementary Material (ESI) for Catalysis Science & Technology.

Supporting Information for

Catalytic performance of Pd promoted Cu hydrotalcite-derived catalyst in partial hydrogenation of acetylene: Effect of the Pd-Cu alloy formation

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Analysis on morphology and structure of catalyst

The SEM images of Mco-PdCu/MgAl-cHT and I-PdCu/MgAl-cHT are shown in Fig. S1. In Mco-PdCu/MgAl-cHT, the flower-like structure with outer trumpet-like pores is obviously demonstrated. Correspondingly, flake-shaped MgAl-cHT crystallites are observed in I-PdCu/MgAl-cHT. The morphological difference in the crystallites results in the change of surface area of catalysts.

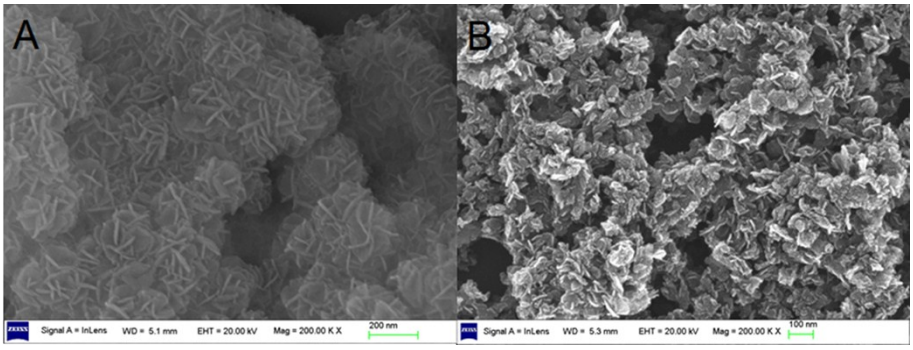

Fig. S1 The SEM images of (A) Mco-PdCu/MgAl-cHT and (B) I-PdCu/MgAl-cHT

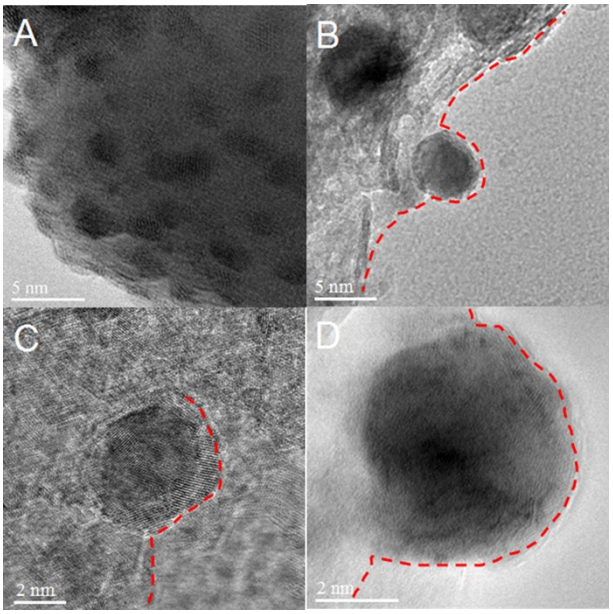

Fig. S2 HRTEM of Mco-PdCu/MgAl-cHT catalyst.

The Koros–Nowak test

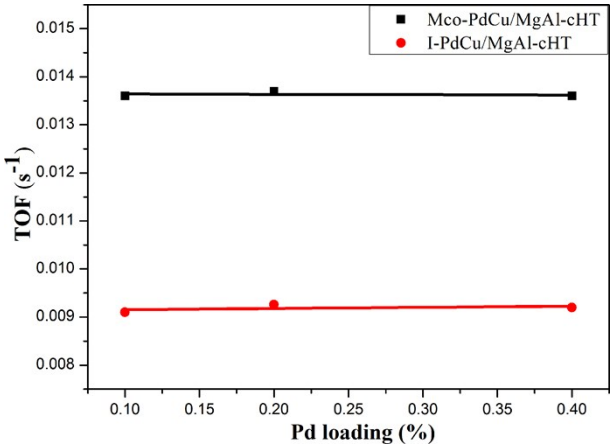

Fig. S3 Plots of TOF versus Pd loading for different catalysts at 30 ^{o}C