

Supplementary Information

One-pot Synthesis of Flowerlike Ni₇S₆ and its Application in Selective Hydrogenation of Chloronitrobenzene

Feng Cao,^{ab} Ruixia Liu,^{ab} Liang Zhou,^{ab} Shuyan Song,^{ab} Yongqian Lei,^{ab} Weidong Shi,^{ab} Fengyu Zhao,^{ab} and Hongjie Zhang*^{ab}

Supplementary information comprising: (1) SEM images of samples obtained using (a) ethylenediamine; (b) Triethanolmine (TEA) and (c) n-Butylamine. In these cases, samples were prepared at 180°C, H₂O/EA volume ratios =4:1, and a reaction time of 12 h, Fig. S1; (2) XRD patterns of the products: microspheres, nanoplates, urchins, Fig. S2-3; and (3) SEM images of the samples prepared under different Ni/S molar ratios: (a) 1:1; (b) 1:2; In all cases, samples were prepared at 180°C, and a reaction time of 12 h, Fig. S4;

Fig. S1 SEM images of samples obtained using (a) ethylenediamine; (b) Triethanolmine (TEA) and (c) n-Butylamine. In these cases, samples were prepared at 180°C, H₂O/EA volume ratios =4:1, and a reaction time of 12 h.

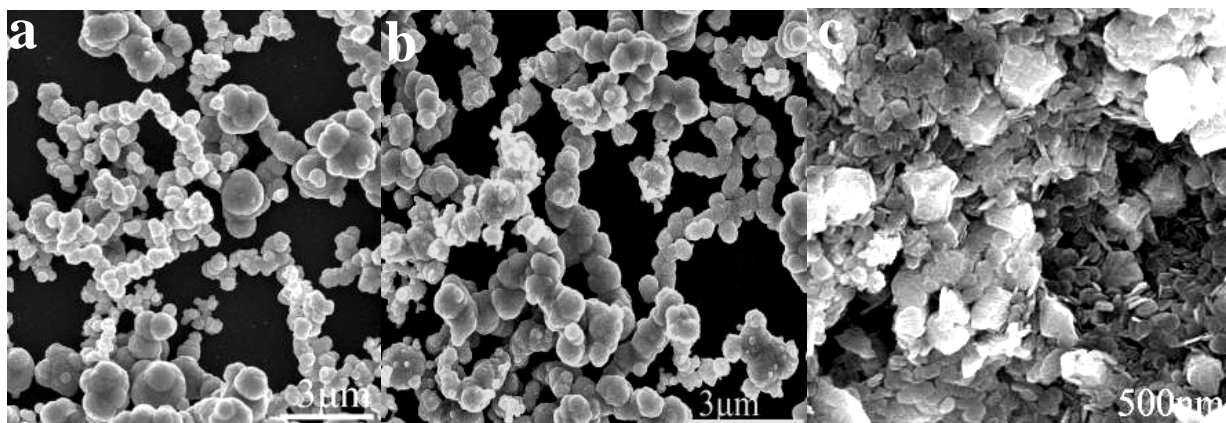


Fig. S2 XRD patterns of the products: (a) microspheres, and (b) nanoplates.

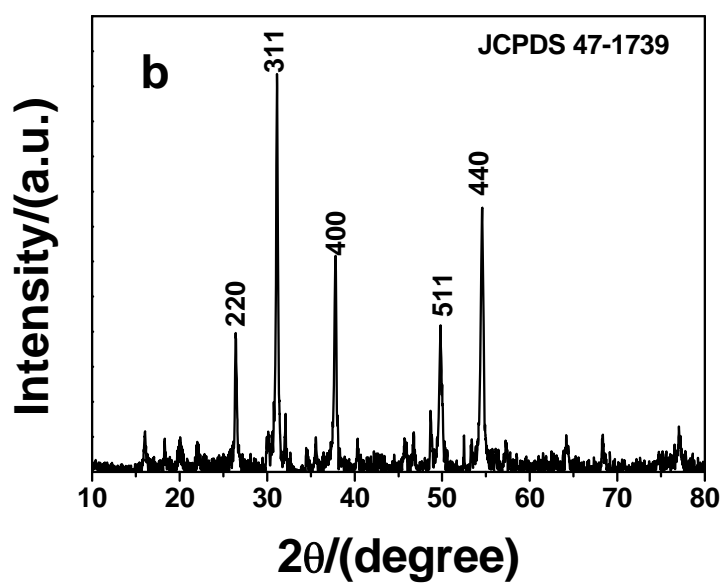
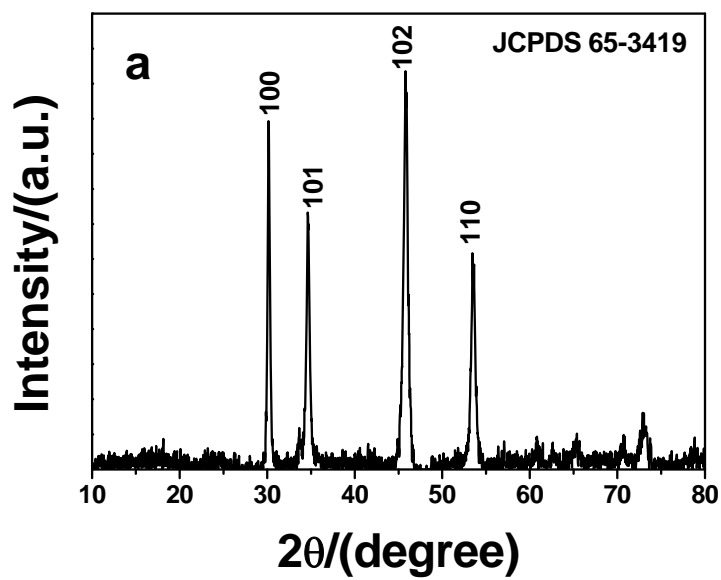


Fig. S3 XRD pattern of the urchin-like product.

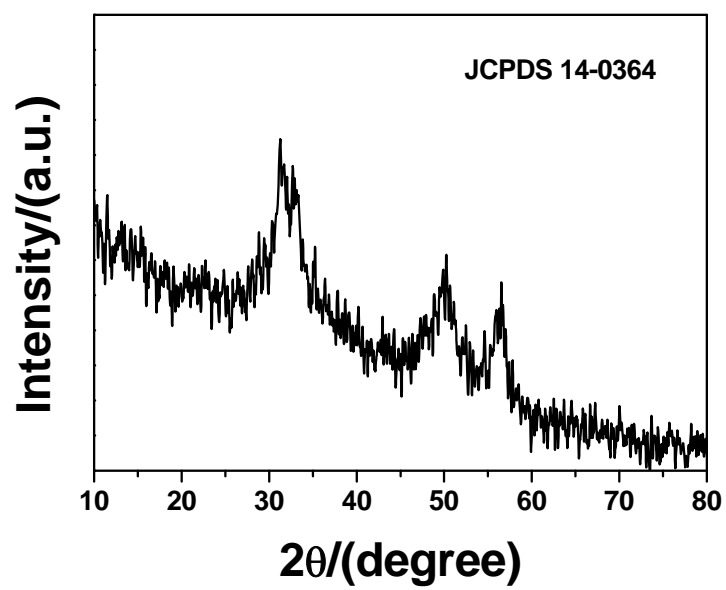


Fig. S4 SEM images of the samples prepared under different Ni/S molar ratios: (a) 1:1; (b) 1:2; In all cases, samples were prepared at 180 °C, and a reaction time of 12 h.

