Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Tailored synthesis of well-faceted single crystals of Fe_3O_4 and their application in p-nitrophenol reduction

Jun Liang, Ajuan Yue, Qingcheng Wang, Shuang Song, and Li Li **

[b]*College of Chemistry and Chemical Engineering, Ningxia University, Yinchuan 750021, China.*

Email:junliang@nxu.edu.cn (J.Liang) ; li_l@nxu.edu.cn

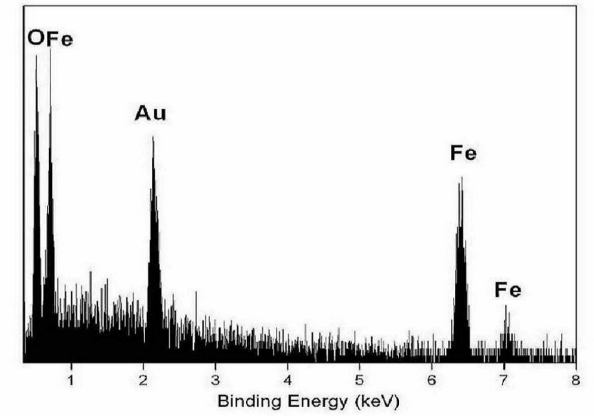

Figure S1. EDX spectrum of the as-obtained Fe_3O_4 samples.

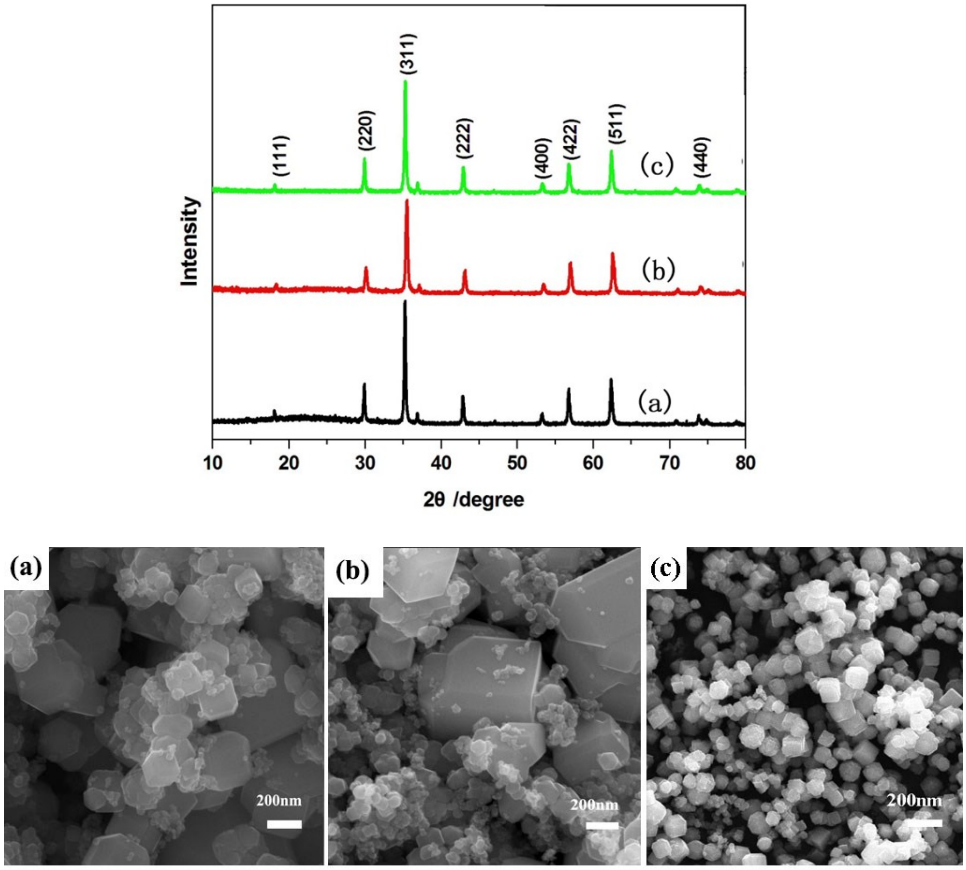

Figure S2. XRD patterns and SEM images of the Fe_3O_4 products obtained at 413 K with different hydrothermal system: (a) H_2O, (b) H_2O–ethanolamine, and (c) H_2O–diethanolamine.

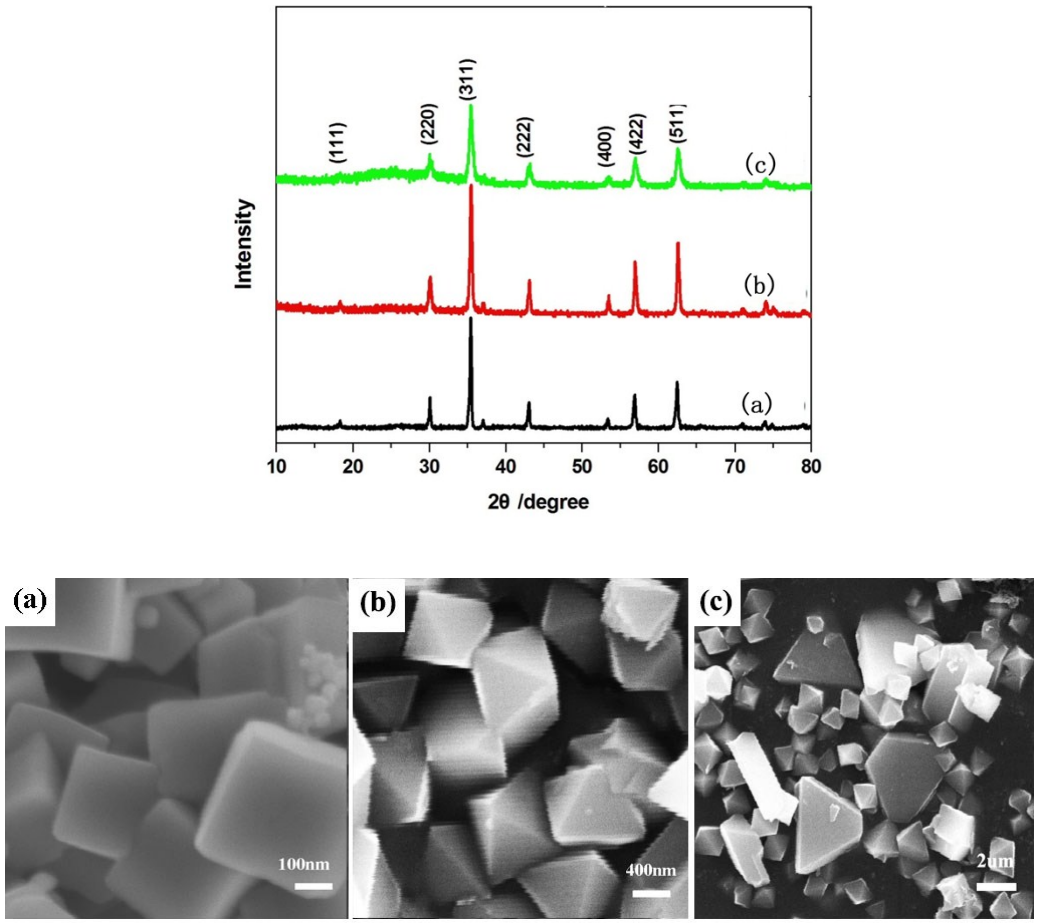

Figure S3. XRD patterns and SEM images of the Fe_3O_4 products obtained at 413 K with different NaOH amount: (a) 0.0 g, (b) 0.20 g, and (c) 0.4 g.

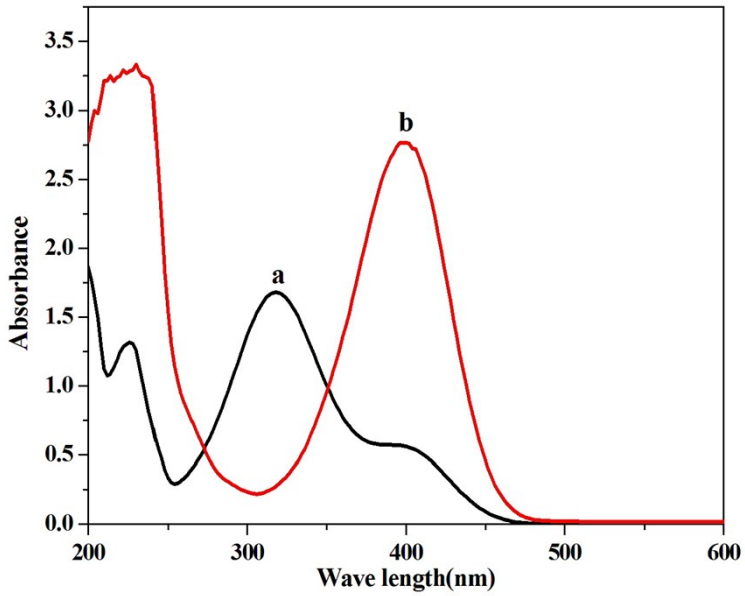

Figure S4. UV-Vis absorption spectra of p-nitrophenol before (a) and after (b) adding N_2H_4 and NaOH solution

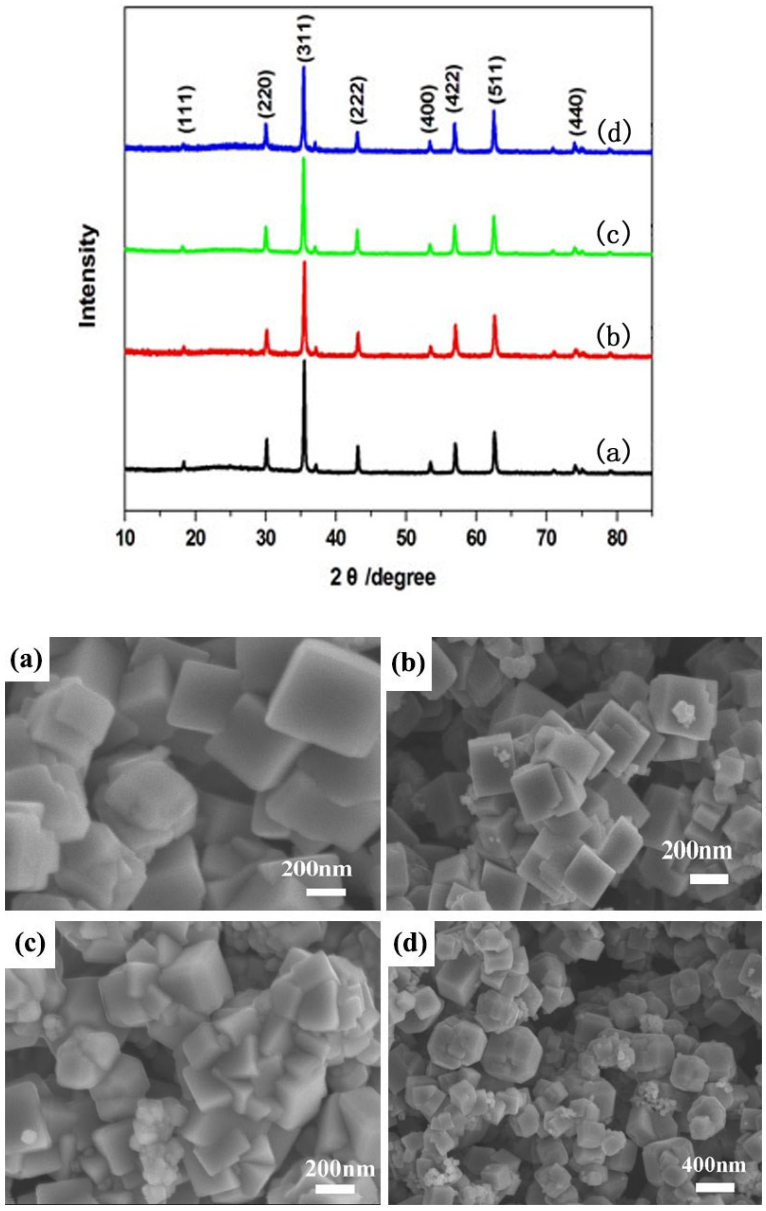

Figure S5. XRD patterns and SEM images of the Fe_3O_4 products obtained at different hydrothermal temperatures: (a) 393 K, (b) 413 K, (c) 433 K, and (d) 453 K.