

Supporting Information

Morphology of the Products from Different Amount of Urea

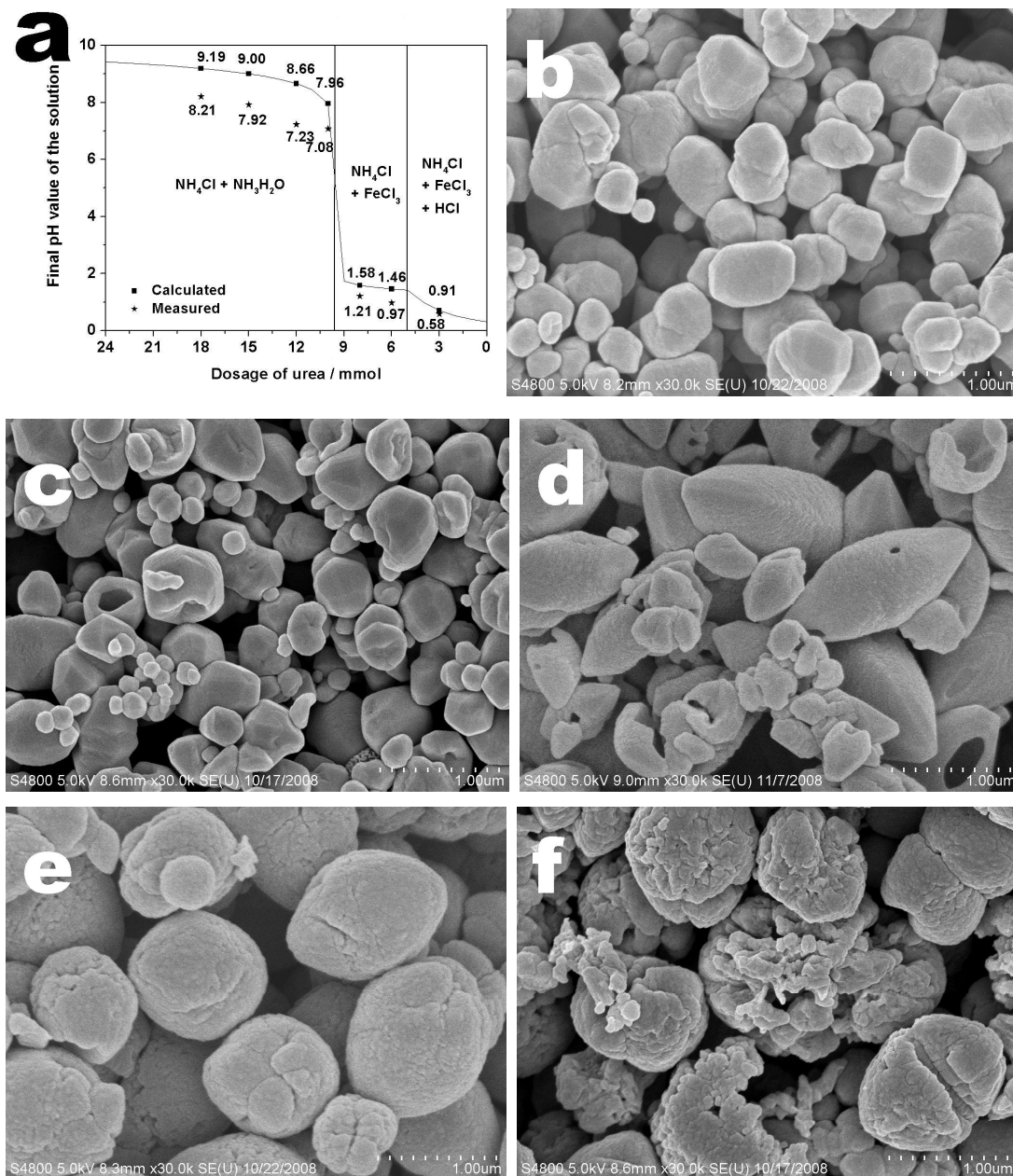


Figure S1. (a) The relationship of calculated and measured final pH value to the dosage of urea. FE-SEM images of the products obtained from the solution with different dosage of urea: (b) 18 mmol, (c) 15 mmol, (d) 10 mmol, (e) 8 mmol, (f) 6 mmol.

BET Test of the Hematite Hollow Spindles

The hollow nature of the hematite spindle and the porosity of its shell were confirmed by measurement of the Brunauer-Emmett-Teller (BET) surface area and corresponding nitrogen adsorption and desorption isotherms. The isotherm can be categorized as type IV, with a distinct hysteresis loop observed in the range of 0.3-1.0 P/P_0 (Figure S2). The BET surface area of the as-obtained hematite hollow spindle is 20.8 m^2/g . The Barrett-Joyner-Halenda (BJH) analyses show that the hollow spindle possess bimodal pore distribution with the average pore sizes of ca. 20 nm and a broad range of 100-500 nm (inset of Figure S2), the former was attributed to the space between the particles in the shell and the later to the hollow inner of the spindles, respectively.

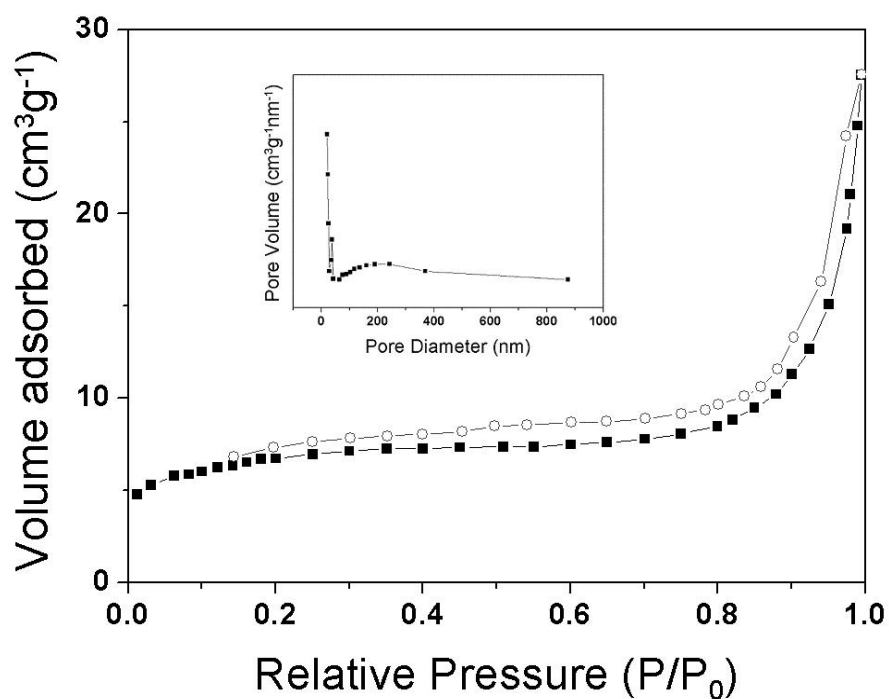


Figure S2. N_2 adsorption-desorption isotherm and BJH pore-size distribution plot (inset) of hematite hollow spindles.