Supporting Information for

One-pot controlled synthesis of single-crystal α-Fe_2O_3 hollow nanostructure and its gas sensing property

Xiao Jia[1], Fang Yue[1], Xiang Chen[1], Hai-Bo Pan[1], Wen-Ge Liu[2] *, Jian-Yong Liu[1] *

[1]College of Chemistry, Fuzhou University, Fuzhou 350002, P. R. China

[2] Department of Orthopedics, Affiliated Union Hospital of Fujian Medical University, Fuzhou 350001, P. R. China

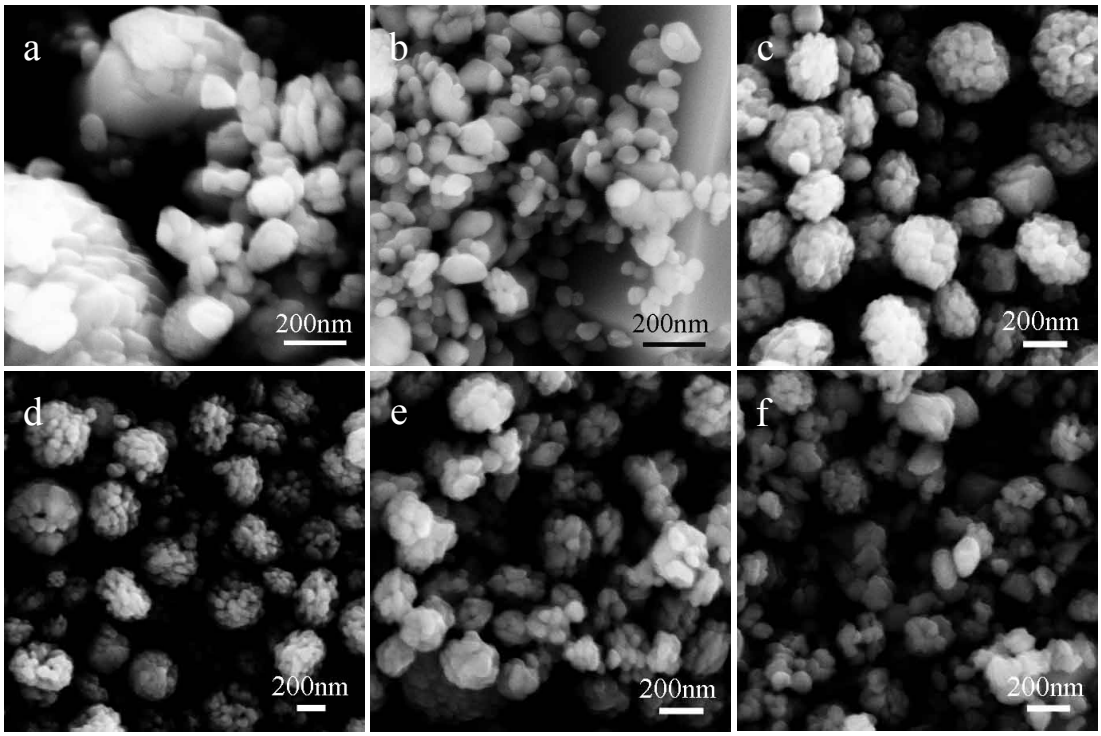

Fig. S1 SEM images of the samples prepared with different solvent ratio. (a) with 20mL of ethanol; (b) with 20mL of octanol; (c) with 15mL of octanol and 5mL of ethanol ; (d) with 10mL of octanol and 10mL of ethanol; (e) with 8mL of octanol and 12mL of ethanol; (f) with 5mL of octanol and 15mL of ethanol;

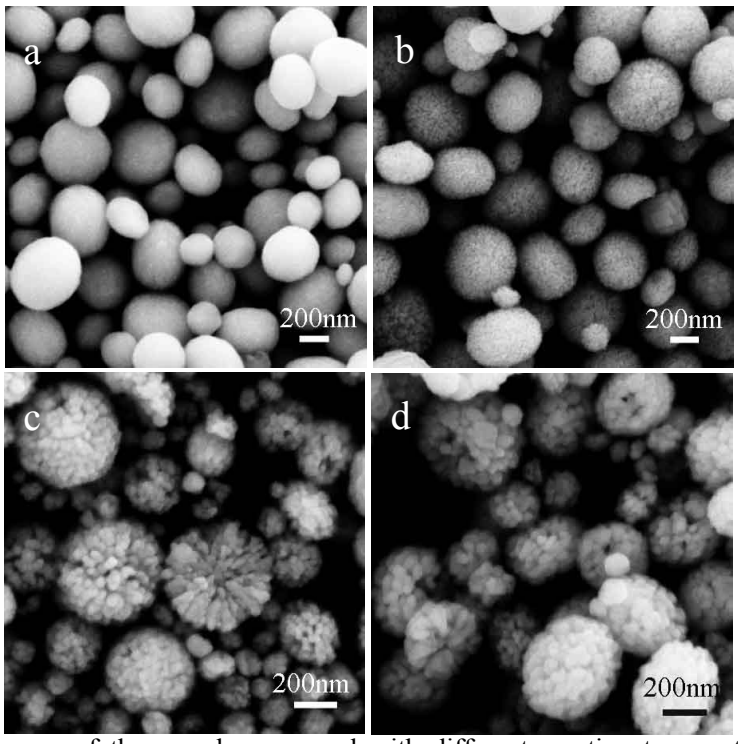

Fig. S2 SEM images of the samples prepared with different reaction temperature. (a) 150°C; (b)170°C; (c)190°C; (d)200°C.

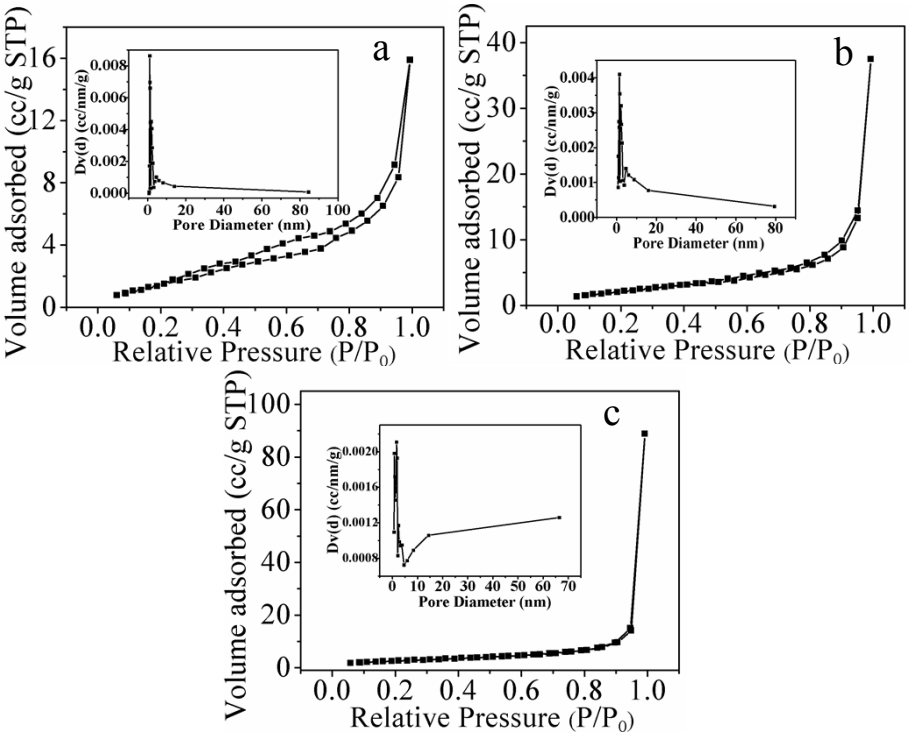

Fig. S3 Nitrogen adsorption-desorption isotherm and the corresponding pore size distribution curve for the hollow α-Fe_2O_3 spheres with different amounts of NaAc: (a) 0.06 g; (b) 0.12 g; (c) 0.26 g.