

Supporting Information

Effect of annealing temperature on structure of carbon encapsulated Fe₃O₄ nanospheres

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Fig.S1 presents representative SEM and TEM images of Fe₃O₄@C-5 with different heating rate of 50, 25 and 10°C/min. According to Fig.S1, the average diameters of the three samples are 110, 108 and 109 nm, respectively. And the thicknesses of the carbon layers are about 13, 14 and 13 nm. There is little difference for the average diameter, carbon layer thickness and microstructure between these three resultants. Thus, it can be speculated that the heating rate discussed in our work has hardly obvious effect on the morphology and structure of Fe₃O₄@C nanospheres. Therefore, we chose heating rate 50°C/min for further experiments.

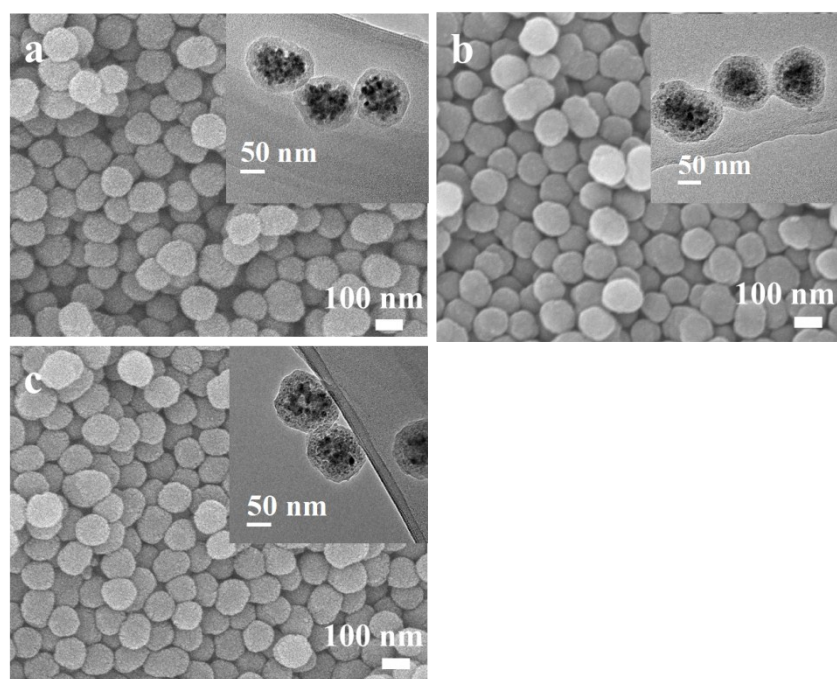


Fig.S1 SEM and TEM images of Fe₃O₄@C-5 with heating rate of (a) 50, (b) 25 and (c) 10°C/min.