Supplementary Material (ESI) for Journal of Materials Chemistry

Facile Synthesis of Size-Controllable Monodispersed Ferrite Nanospheres

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Supplementary Information

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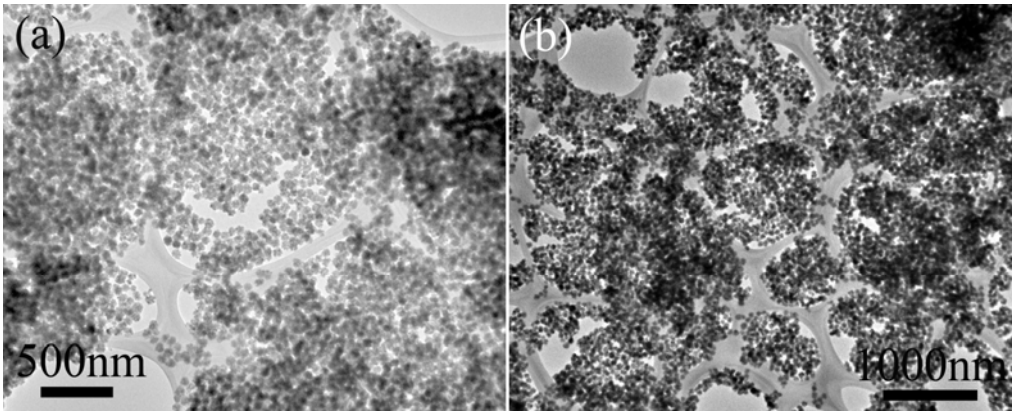


Figure S1. TEM images of the as-prepared (a) $MnFe_2O_4$ and (b) $NiFe_2O_4$ nanospheres.

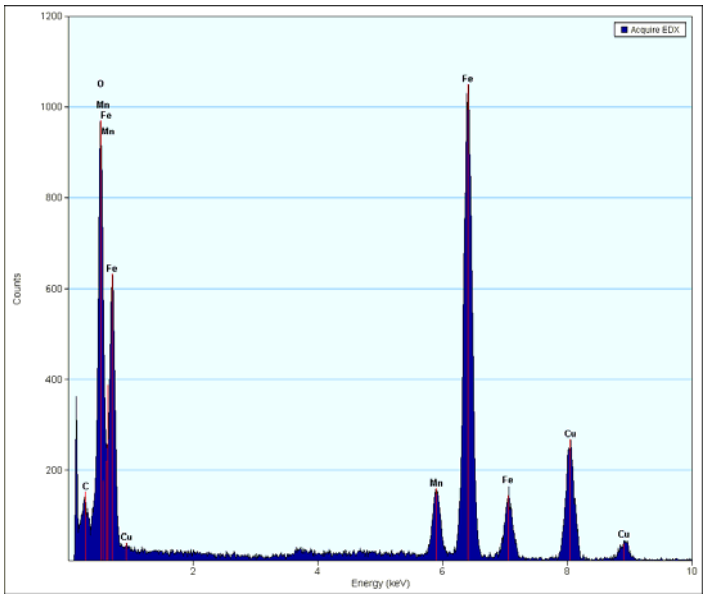


Figure S2. EDX spectrum of the as-prepared $MnFe_2O_4$ nanospheres.

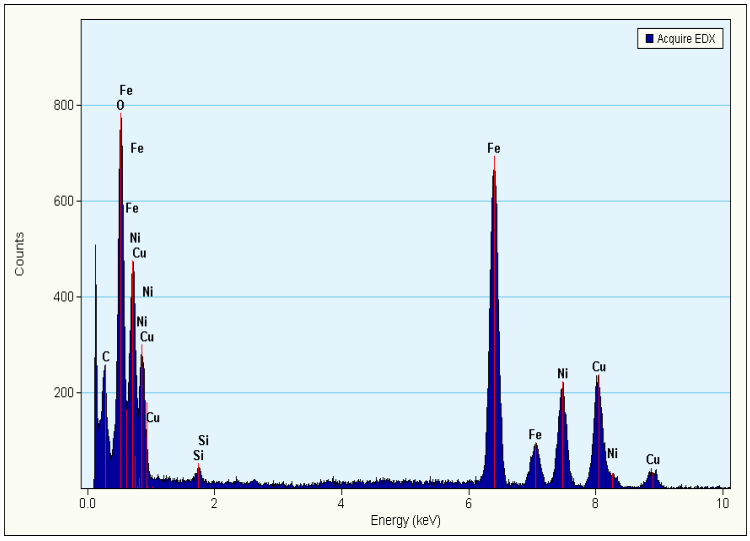
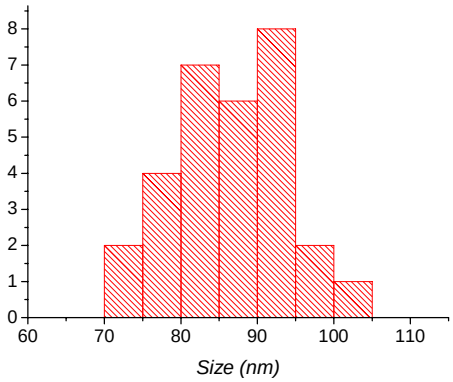
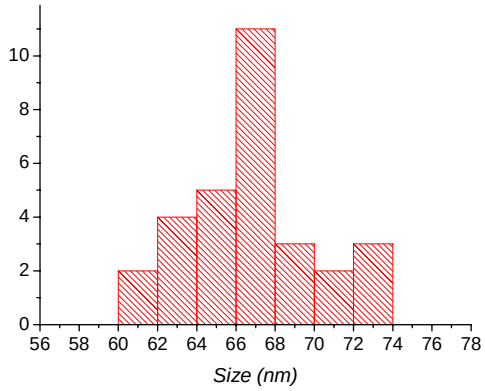


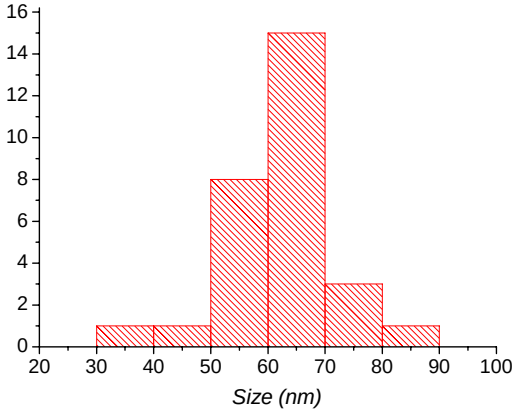
Figure S3. EDX spectrum of the as-prepared $NiFe_2O_4$ nanospheres.



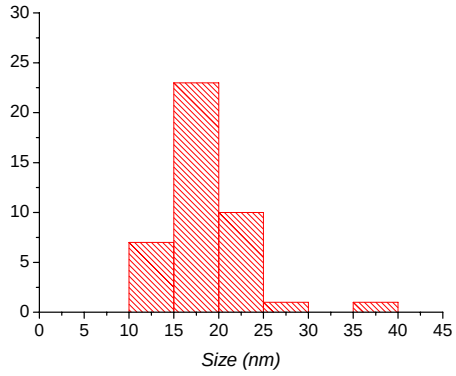
Size distribution of $MnFe_2O_4$



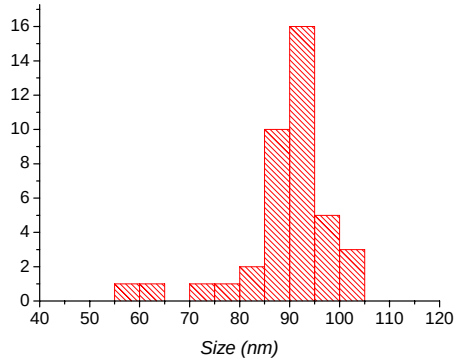
Size distribution of $ZnFe_2O_4$



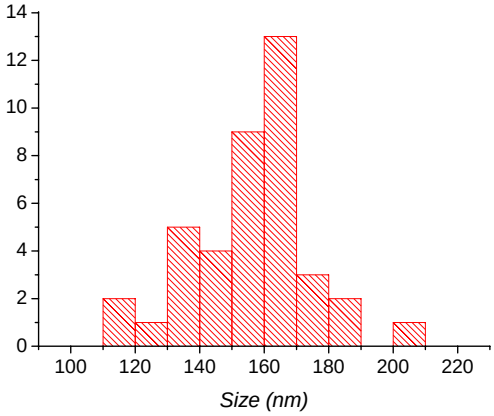
Size distribution of $NiFe_2O_4$



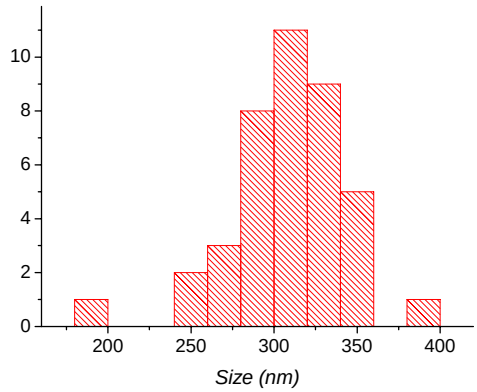
Size distribution of 20 nm Fe_3O_4



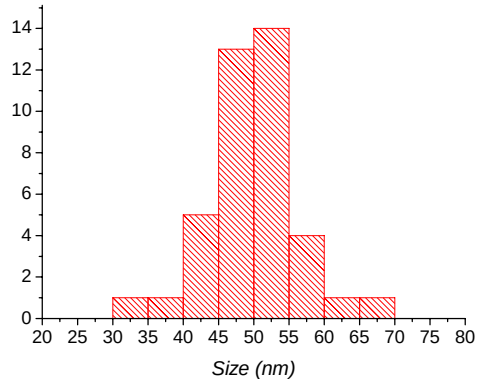
Size distribution of 90 nm Fe_3O_4



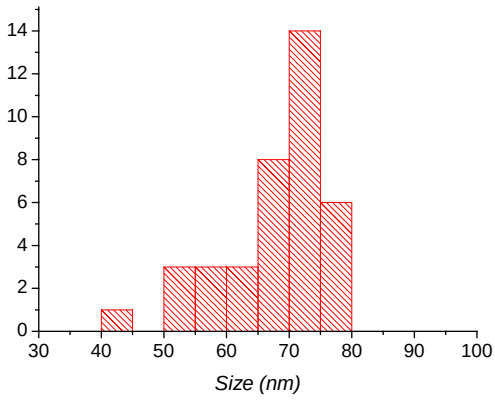
Size distribution of 160 nm Fe_3O_4



Size distribution of 300 nm Fe_3O_4



Size distribution of 50 nm Fe_3O_4



Size distribution of 70 nm Fe_3O_4

Figure S4. Size distributions of as-prepared magnetic nanospheres from TEM results.

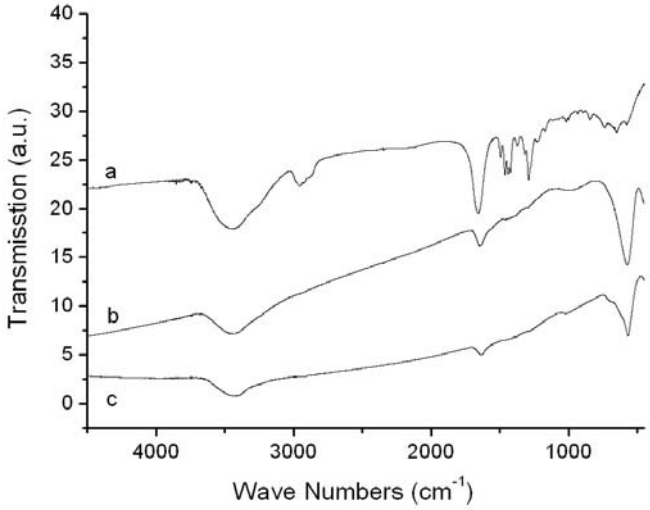


Figure S5. FTIR spectrum of (a) PVP, (b) $ZnFe_2O_4$ nanospheres, and (c) Fe_3O_4 nanosheets.

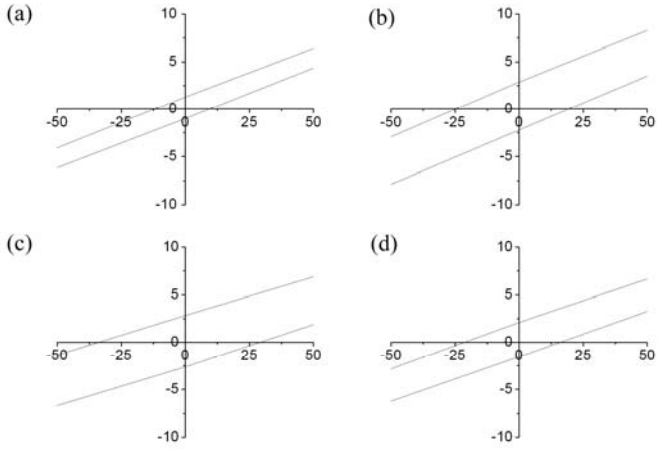


Figure S6. Magnified *M-H* curves of the Fe_3O_4 particles (± 50 Oe) which were synthesized by using different ratio of V_{EG}/V_{DEG}: (a) 1/19 (20 nm), (b) 5/15, (c) 10/10, and (d) 20/0.