

Electronic Supplementary Material (ESI) for Physical Chemistry Chemical Physics.
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Supporting Information

Gradient of zinc content in the core-shell zinc ferrites nanoparticles - precise study on composition and magnetic properties

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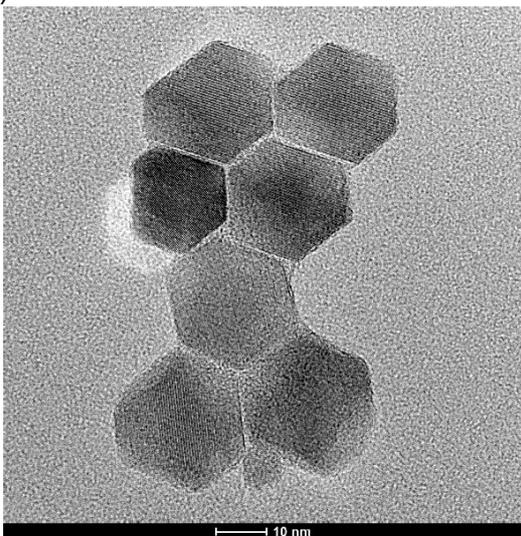
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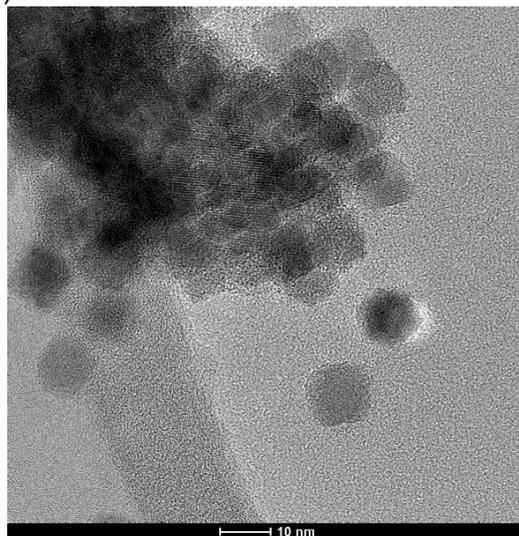
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A.)



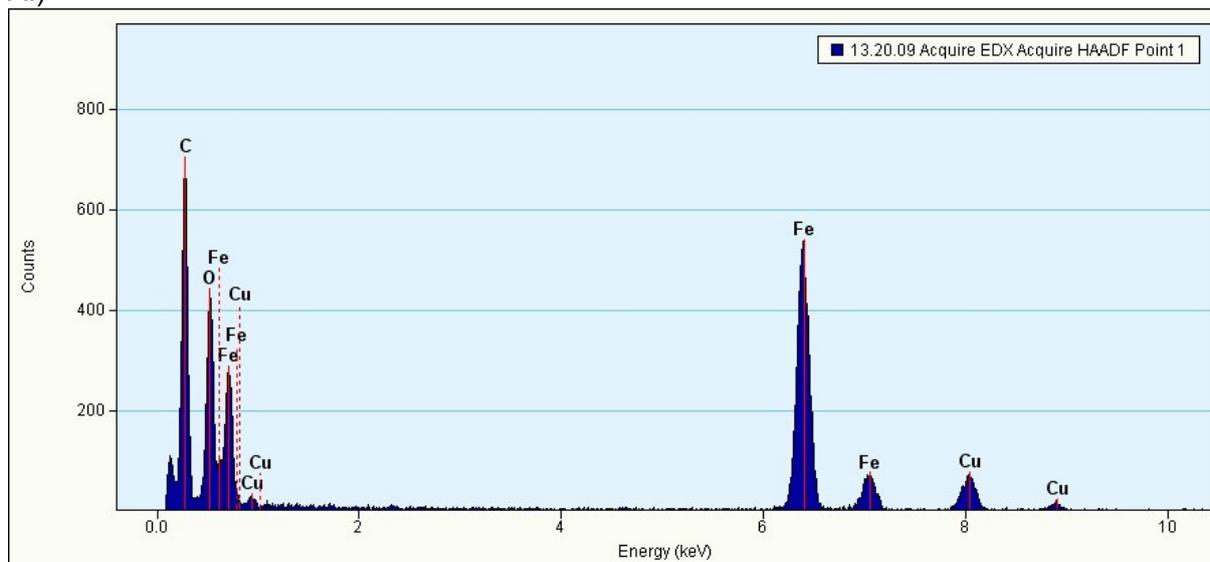
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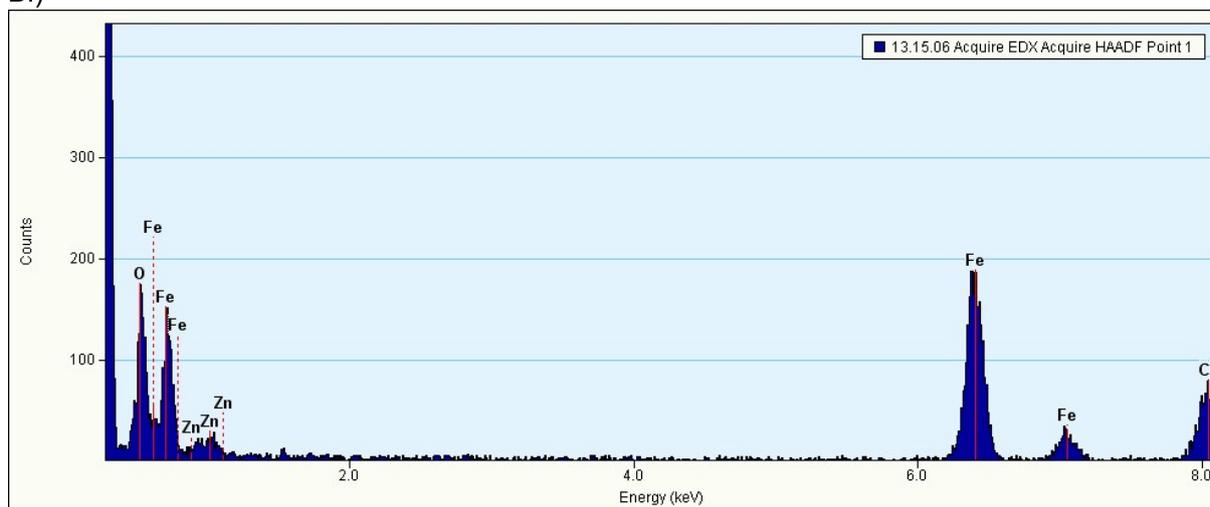
C.)

Figure. S1. HR-TEM pictures of S1(a), S2(b), S3(c) nanoparticles

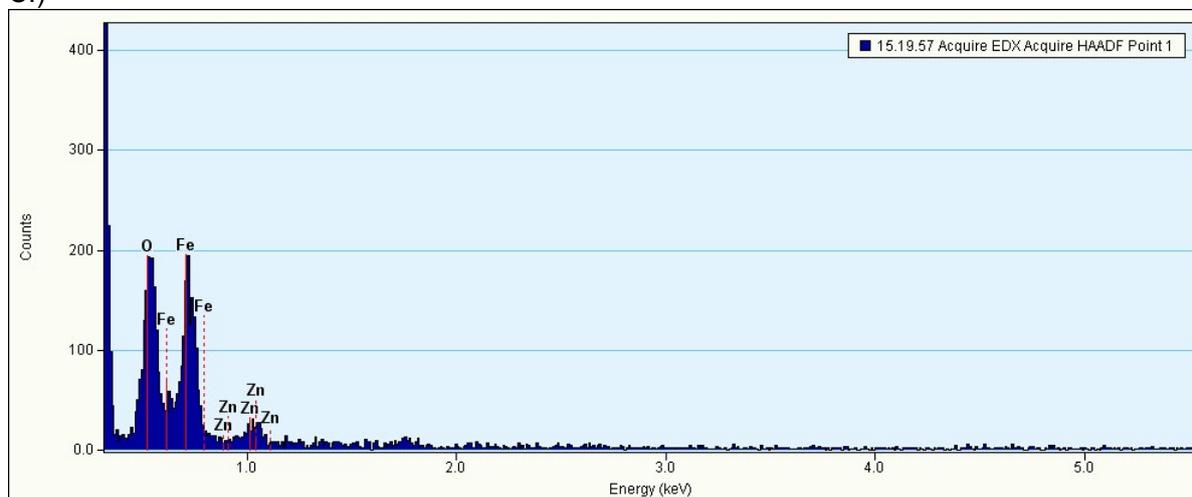
A.)



B.)



C.)



D.)

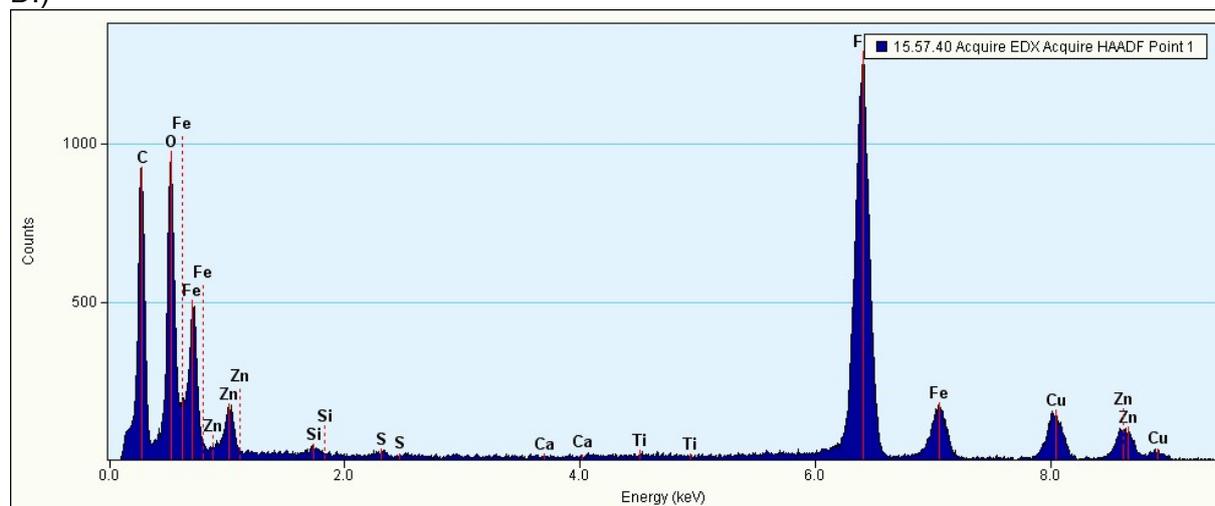


Figure. S2. EDX analysis of S0 (a), S1 (b), S2 (c), S3 (d) nanoparticles

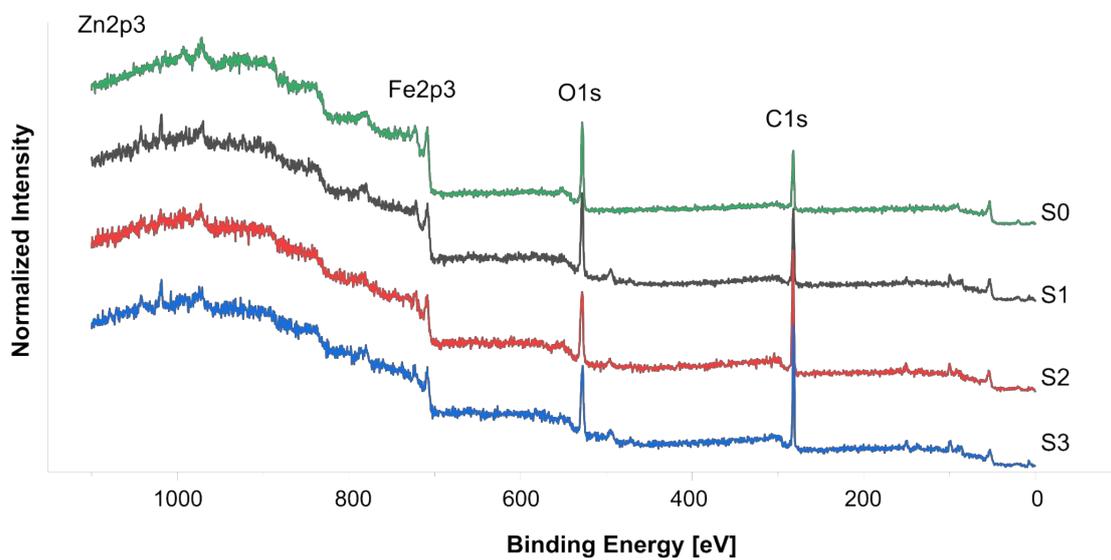


Figure. S3 Survey XPS spectra of magnetite and zinc ferrite nanoparticles

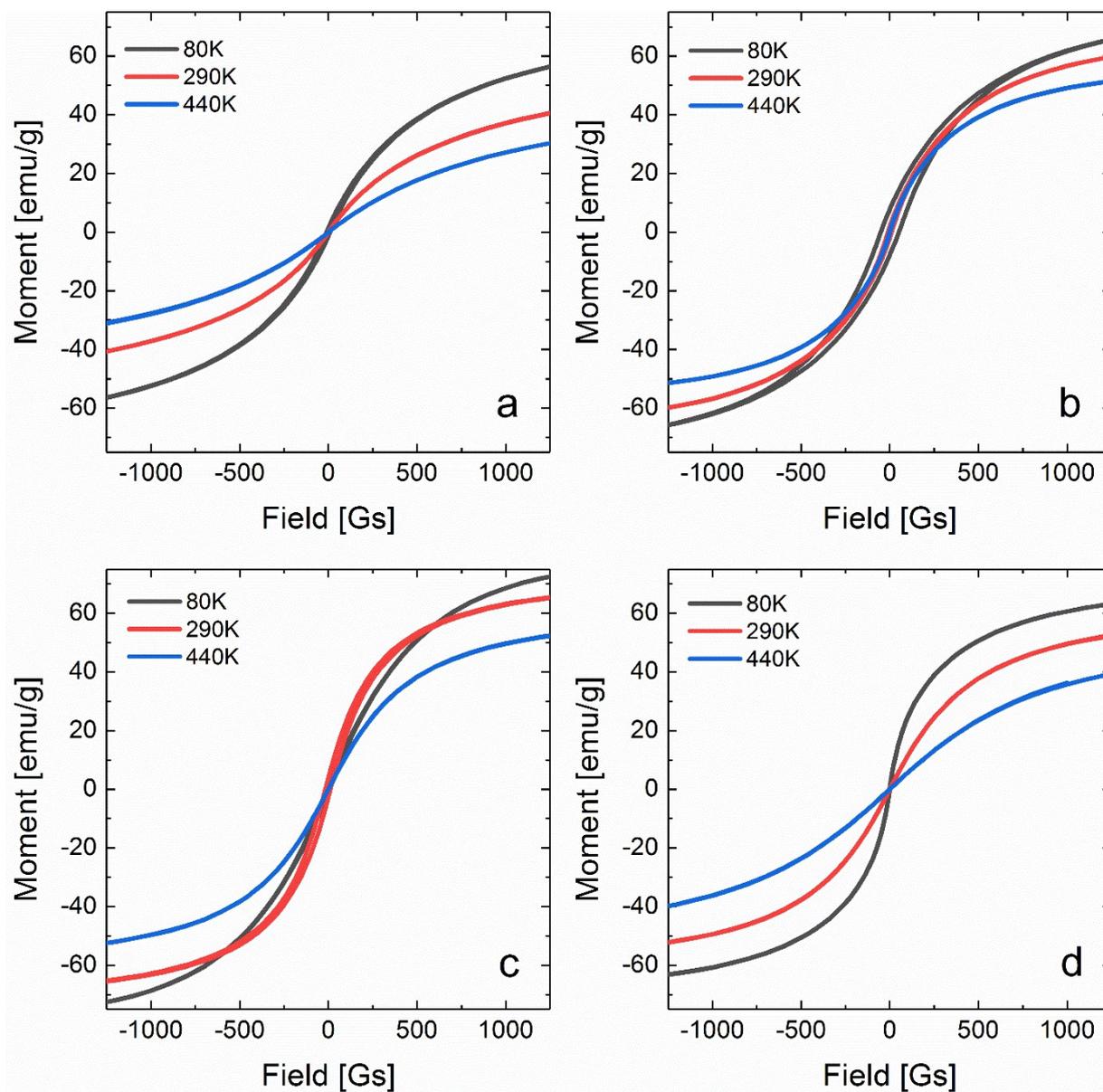


Figure. S4. Hysteresis loops for S0 (a), S1 (b), S2 (c), S3 (d).

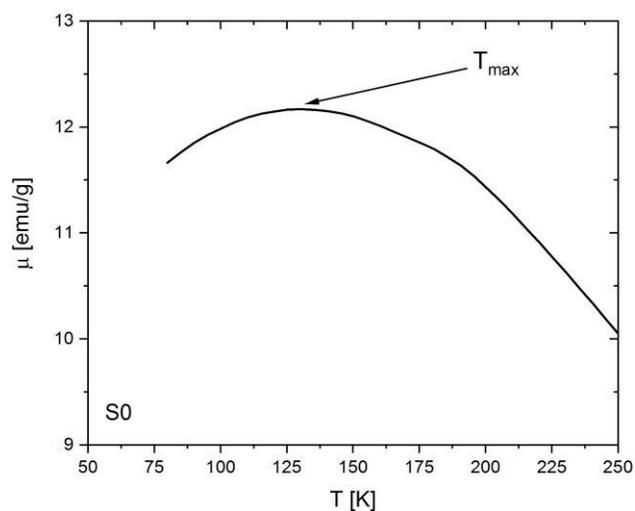


Figure S5. ZFC temperature dependence of DC magnetic susceptibility at magnetic flux of 100Gs for sample S0.

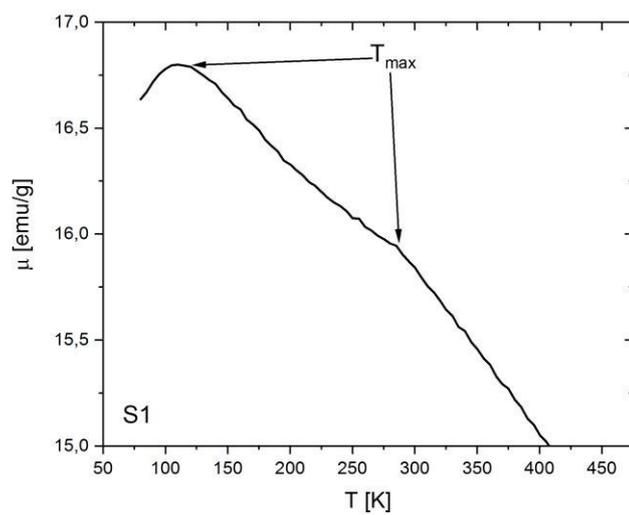


Figure S6. ZFC temperature dependence of DC magnetic susceptibility at magnetic flux of 100Gs for sample S1.