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

Exchange-Biased Hybrid γ-Fe_2O_3/NiO Core-Shell Nanostructures: Three-Step Synthesis, Microstructure, and Magnetic Properties

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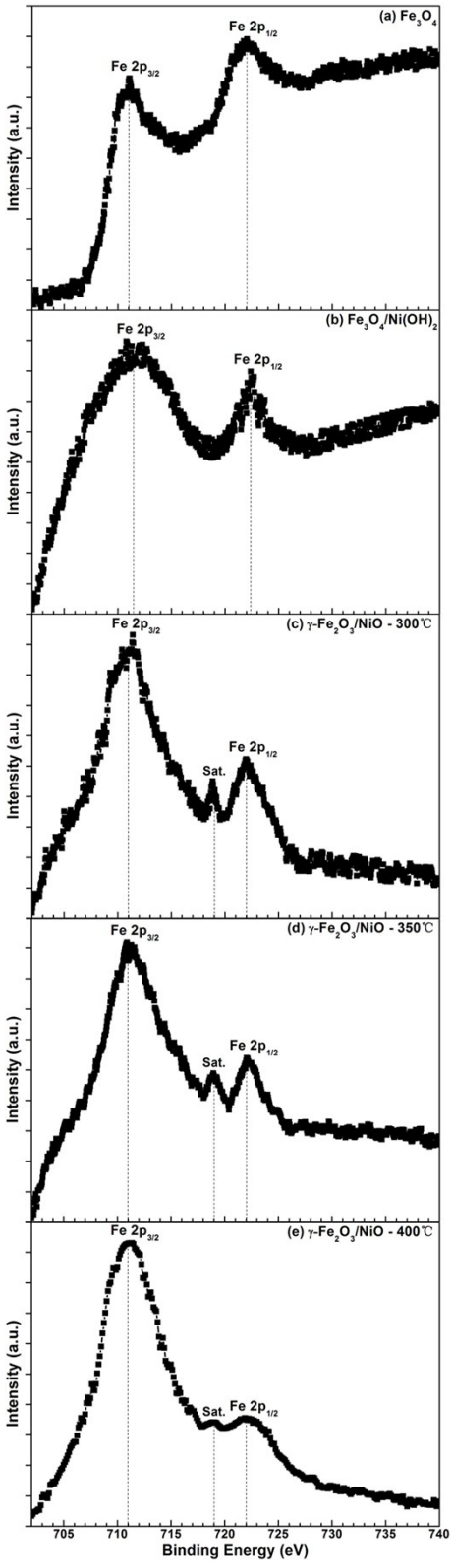
Figure S1. XPS spectra of Fe 2p region for (a) Fe_3O_4, (b) Fe_3O_4/$Ni(OH)_2$, (c) γ-Fe_2O_3/NiO-300℃, (d) γ-Fe_2O_3/NiO-350℃ and (e) γ-Fe_2O_3/NiO-400℃ samples.

Figure S2. XPS spectra of Ni 2p region for (a) Fe_3O_4, (b) Fe_3O_4/$Ni(OH)_2$, (c) γ-Fe_2O_3/NiO-300℃, (d) γ-Fe_2O_3/NiO-350℃ and (e) γ-Fe_2O_3/NiO-400℃ samples.

Figure S3. Raman spectra of (a) Fe_3O_4 and (b) Fe_3O_4/$Ni(OH)_2$ samples.

Figure S4. RT (300 K) hysteresis loop of Fe_3O_4 sample. Inset shows the detail of the same loop around the origin.



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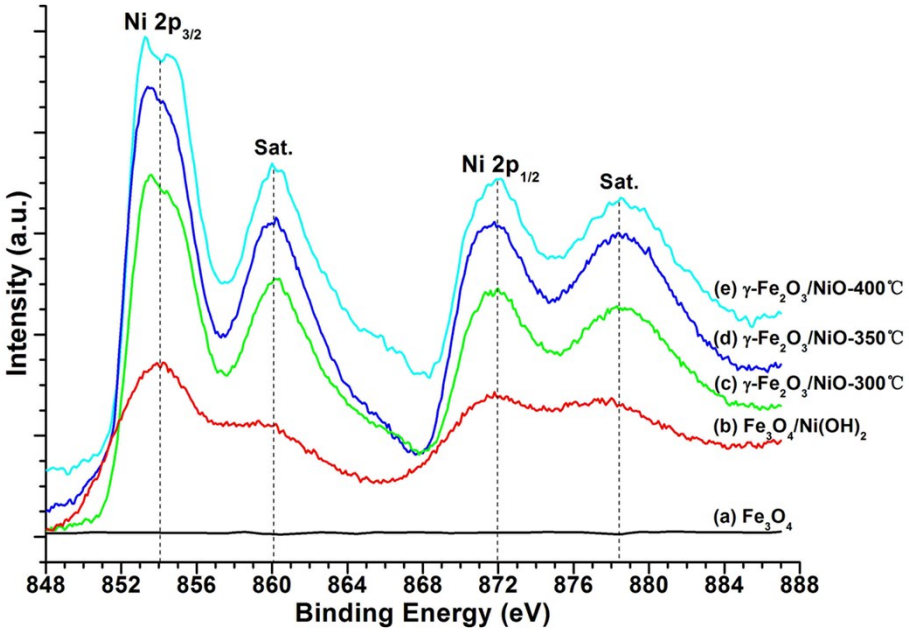
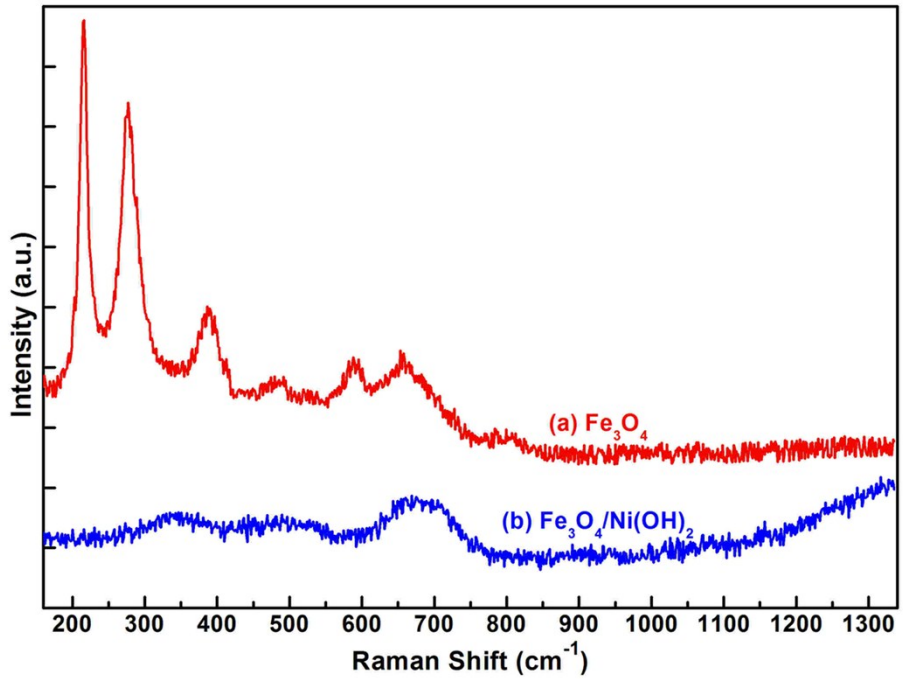


Figure S2. XPS spectra of Ni 2p region for (a) Fe_3O_4, (b) Fe_3O_4/$Ni(OH)_2$, (c) γ-Fe_2O_3/NiO-300℃, (d) γ-Fe_2O_3/NiO-350℃ and (e) γ-Fe_2O_3/NiO-400℃ samples.



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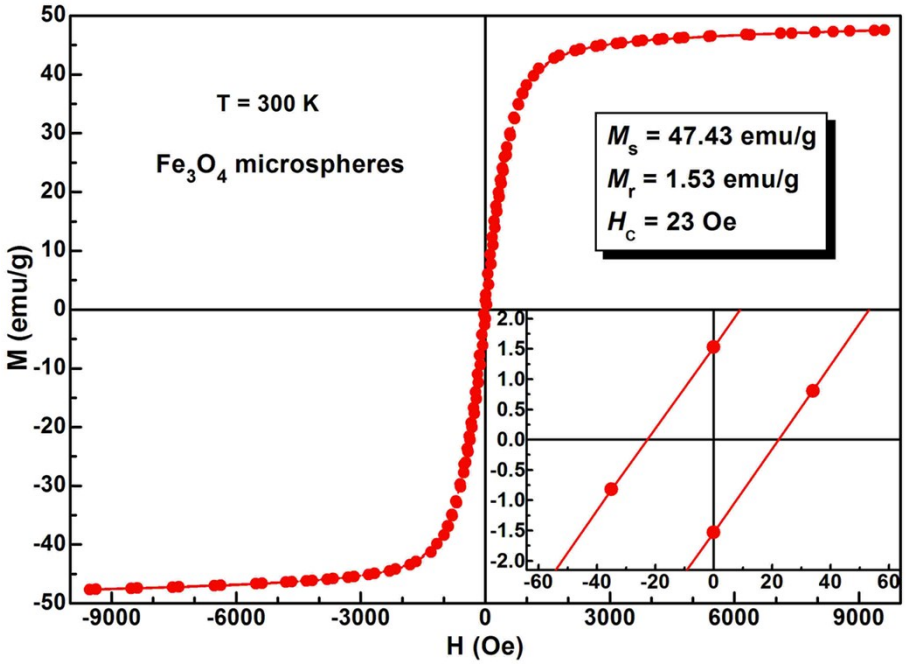

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