

1 **Supporting information for**

2 **Preparation of broccoli-like ferromagnetic cobalt microstructure with superior**

3 **coercivity *via* aqueous reduction strategy**

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### Captions of figures and tables

2 **Fig. S1.** Size distribution of (a) CoT70-NP-1, (b) CoT60-NP-1, (c) CoT50-NP-1, and (d) CoT25-NP-1

3 analyzed using Nano measurer.

4 **Fig. S2.** Size distribution of CoT70-YP-1, (b) CoT60-YP-1, (c) CoT50-YP-1, and (d) CoT25-YP-1

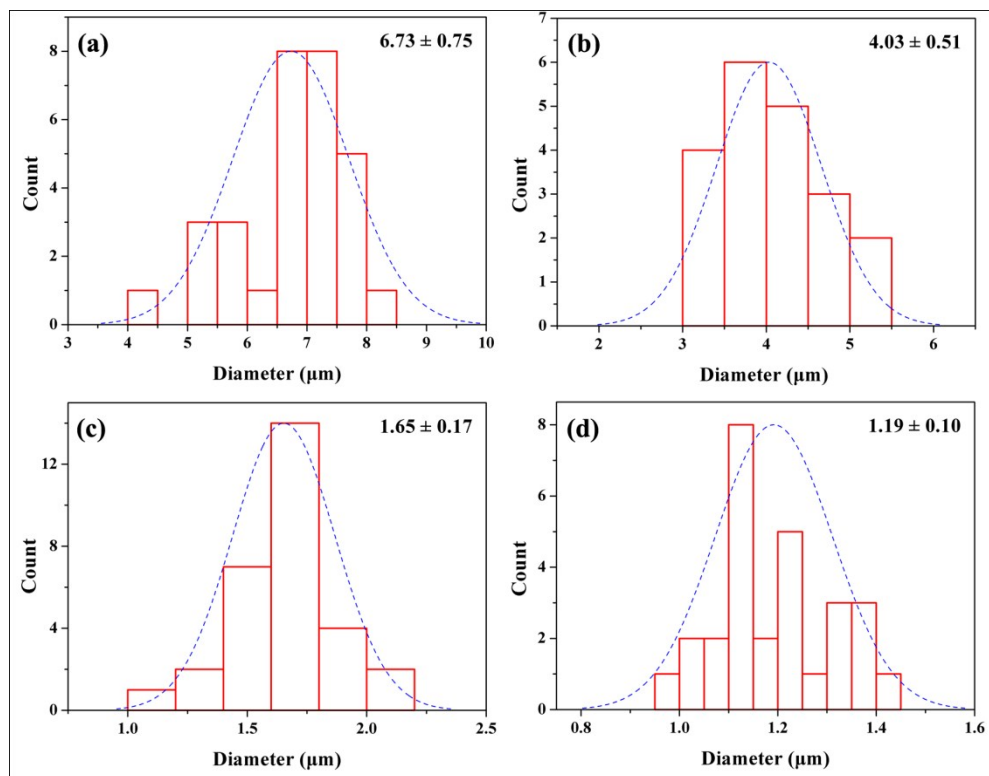
5 analyzed using Nano Measurer.

6 **Fig. S3.** Size distribution of (a) CoT25-NP-2, (b) CoT25-YP-2 analyzed using Nano Measurer.

7 **Fig. S4.** SEM images of products synthesized using different PVP dosages: (a) 1 wt%, and (b) 5 wt%.

8 **Fig. S5.** FTIR spectra of CoT25-YP-1 samples before and after rinse.

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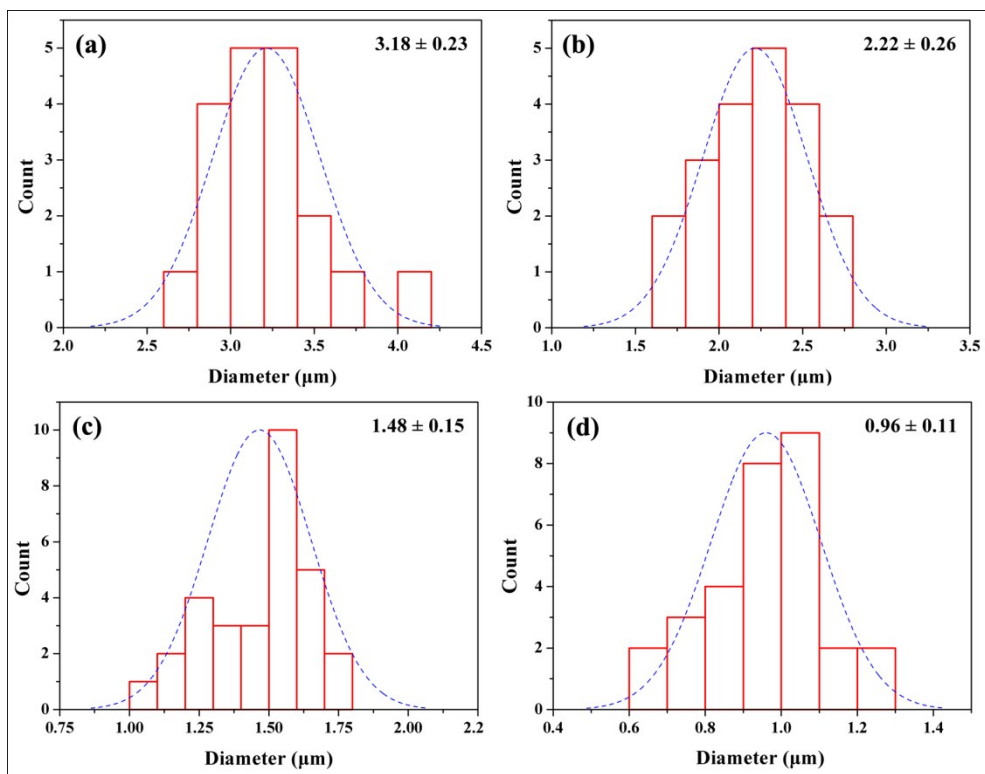
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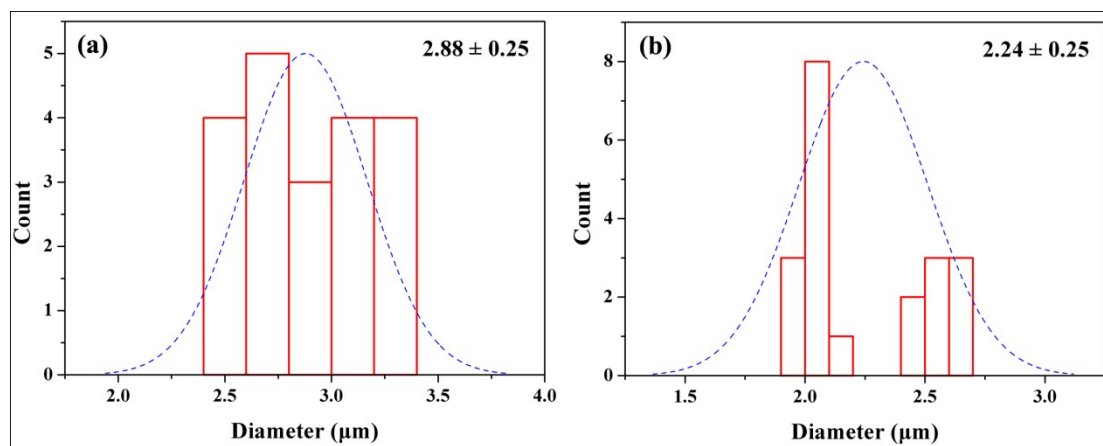


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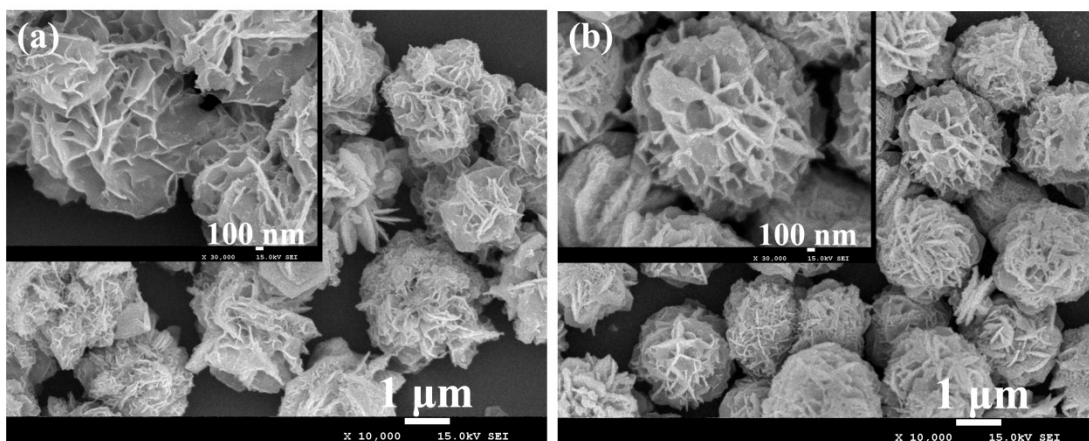


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**Fig. S3.** Size distribution of (a) CoT25-NP-2, (b) CoT25-YP-2 analyzed using Nano Measurer.

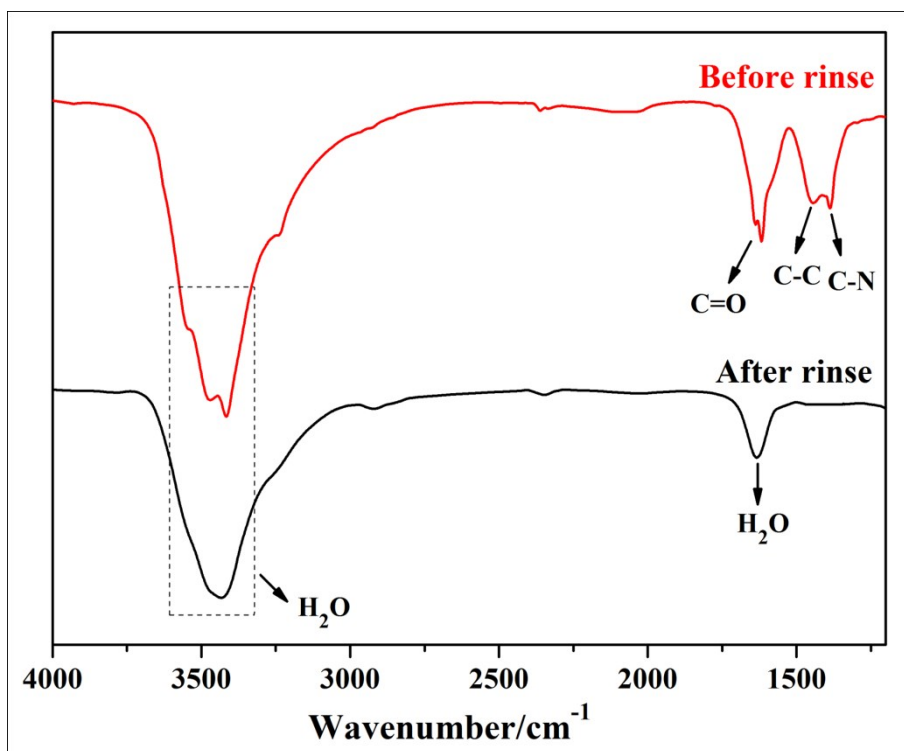
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2 **Fig. S4.** SEM images of products synthesized using different PVP dosages: (a) 1 wt%, and (b) 5 wt%.

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Fig. S5. FTIR spectra of CoT25-YP-1 samples before and after rinse.