

***Electronic Supporting Information file***

**A parametric study on CoFe-based ferrite and alloy nanoparticle synthesis**

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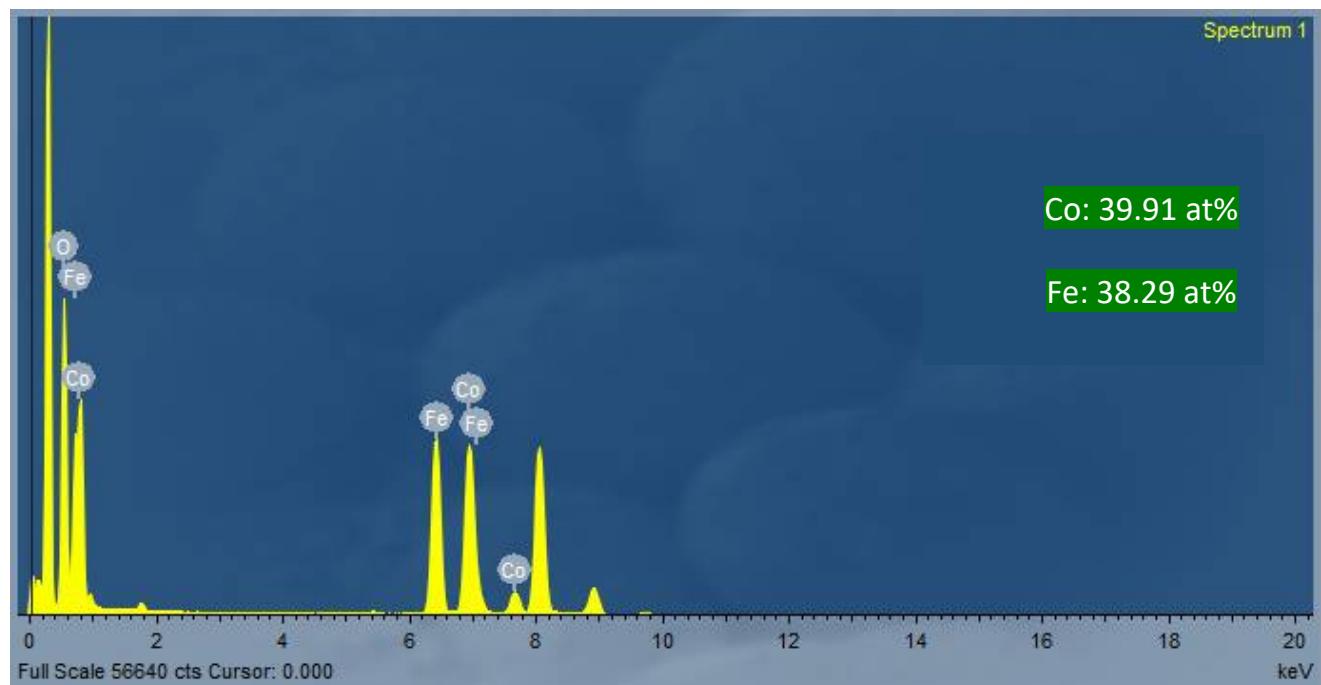
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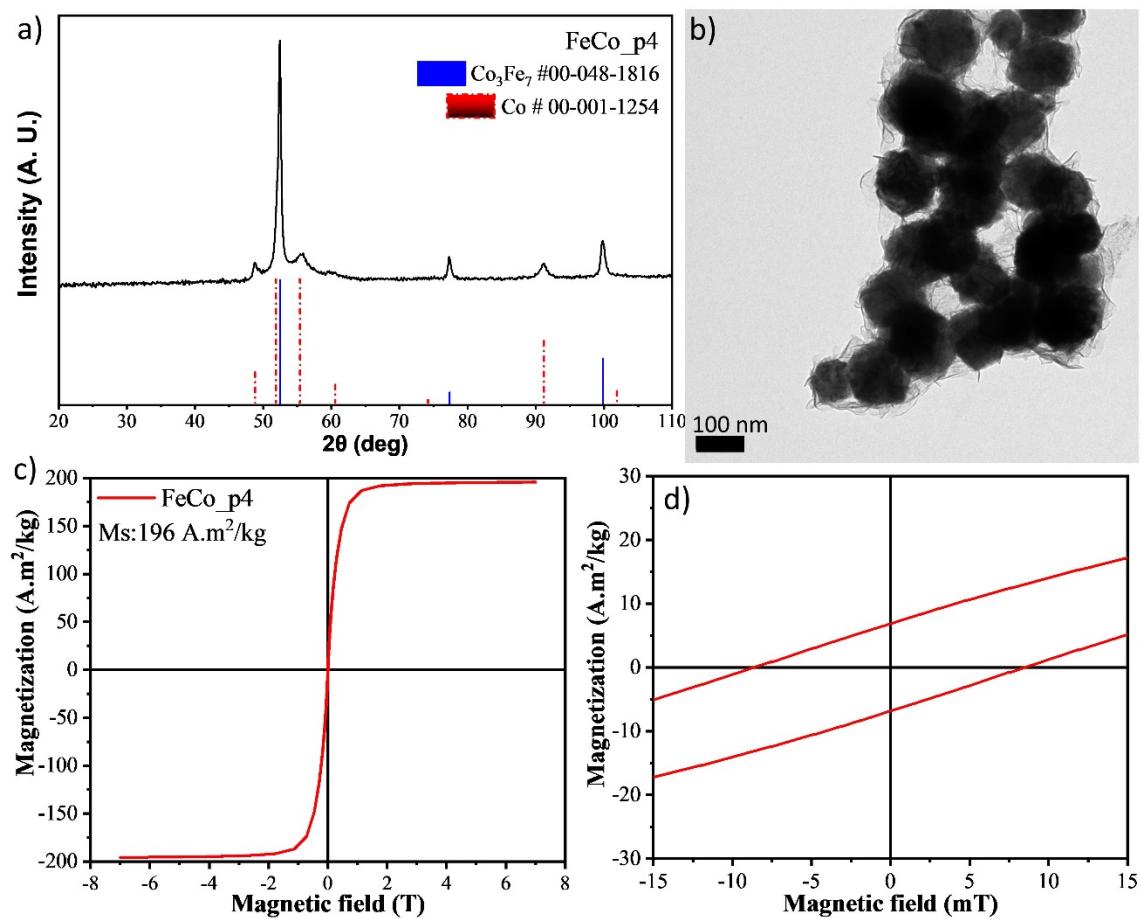
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**Fig. S1** STEM-EDX analysis of the as-prepared FeCo\_C NPs



**Fig. S2** a) XRD diffractogram, b) TEM image and c) SQUID measurement for the sample FeCo\_p4. A close look of the M-H plot between  $-15$  and  $15$  mT is available at the image d).