

Supporting Information

for

Co-doped $MnFe_2O_4$ nanoparticles: magnetic anisotropy and interparticle interactions

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Additional experimental results

Figure S1

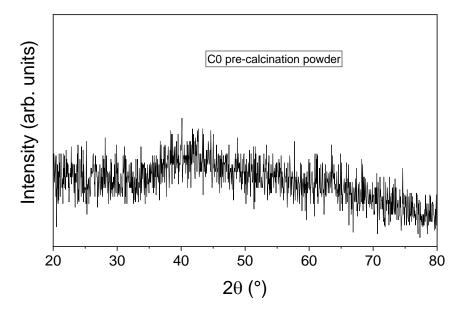


Figure S1: The XRD pattern of sample C0 immediately after the milling process is reported as an example. All samples consist of an amorphous powder at this stage of the synthesis.

Figure S2

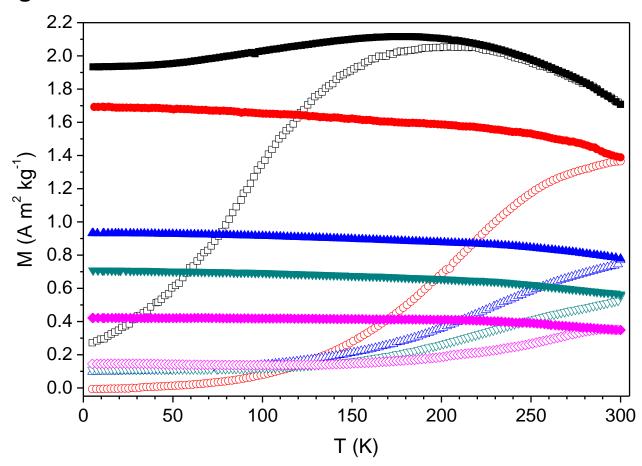


Figure S2: ZFC (empty symbols) and FC (full symbols) for sample C0 (black squares), C25 (red circles), C50 blue triangles), C75 (dark cyan reversed triangles), and C100 (magenta diamonds).

Figure S3

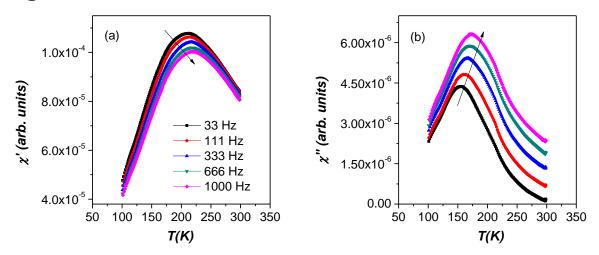


Figure S3: AC susceptibility vs temperature measured at different frequencies for sample C0. Panel (a) in-phase component; panel (b) out-of-phase component.

Figure S4

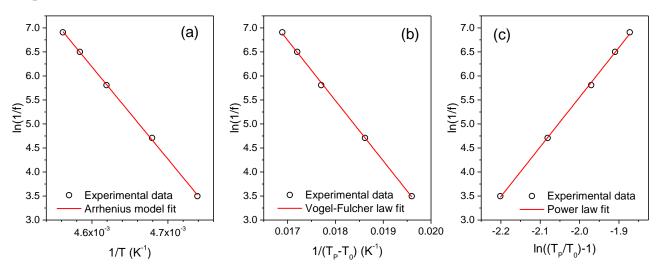


Figure S4: Frequency dependence of T_P in AC curves of sample C0 fitted with the Arrhenius model (a), the Vogel–Fulcher law (b) and the Power law (c).

Table S1

Table S1: Parameter obtained from the AC data fits of sample C0 using the Vogel–Fulcher and the power law.

Model	Values	
Vogel–Fulcher	τ ₀ (s)	7(2)×10 ⁻¹³
	<i>E</i> /k _B (K)	1250(20)
	T ₀ (K)	160(3)
Power law	τ ₀ (s)	4(1)×10 ⁻¹²
	ZV	10.3(2)
	<i>T</i> _g (K)	190(3)