Supplementary Information of

Highly Sensitive Magnetostrictive NiZnCo Ferrites for Low Magnetic Field Sensor Applications

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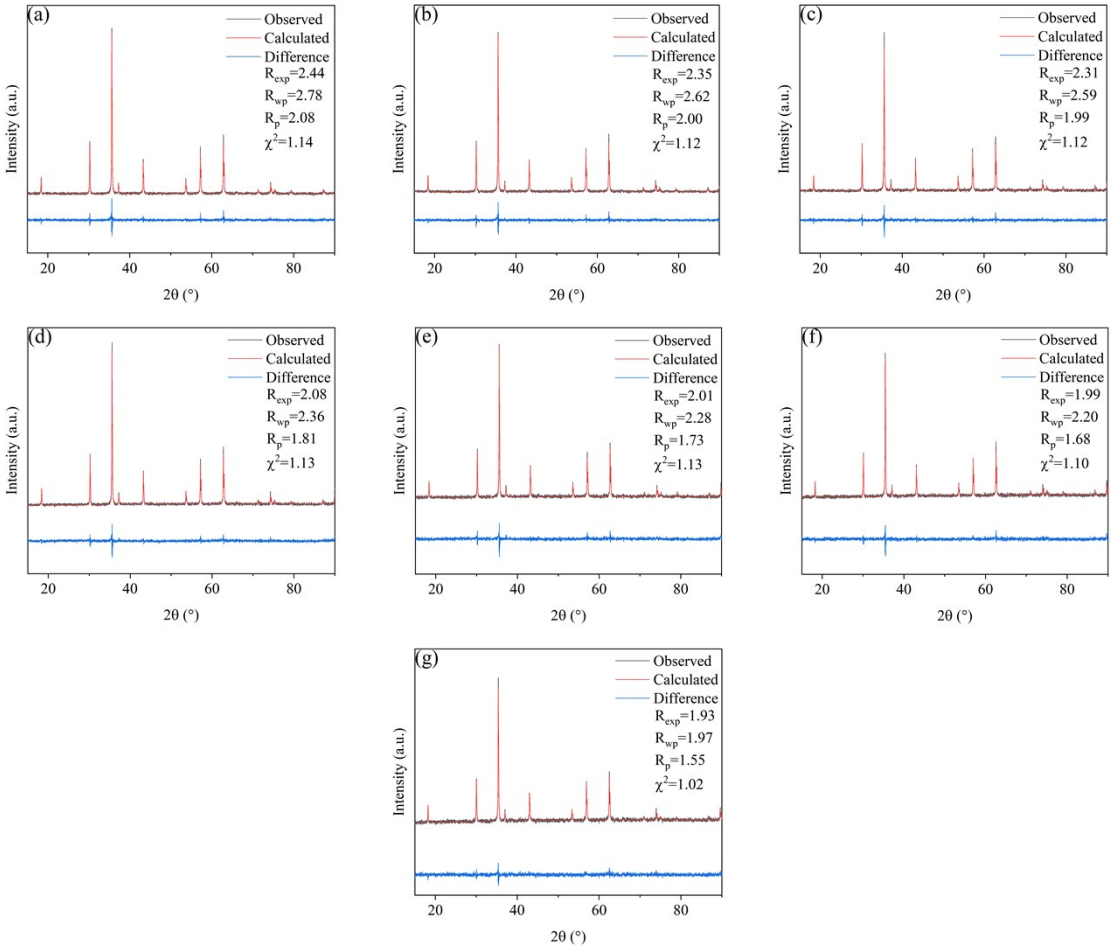

Fig. S1. Rietveld refinement results of x= (a) 0, (b) 0.1, (c) 0.2, (d) 0.4, (e) 0.6, (f) 0.8, (g) 1 for NiZnCo ferrites.

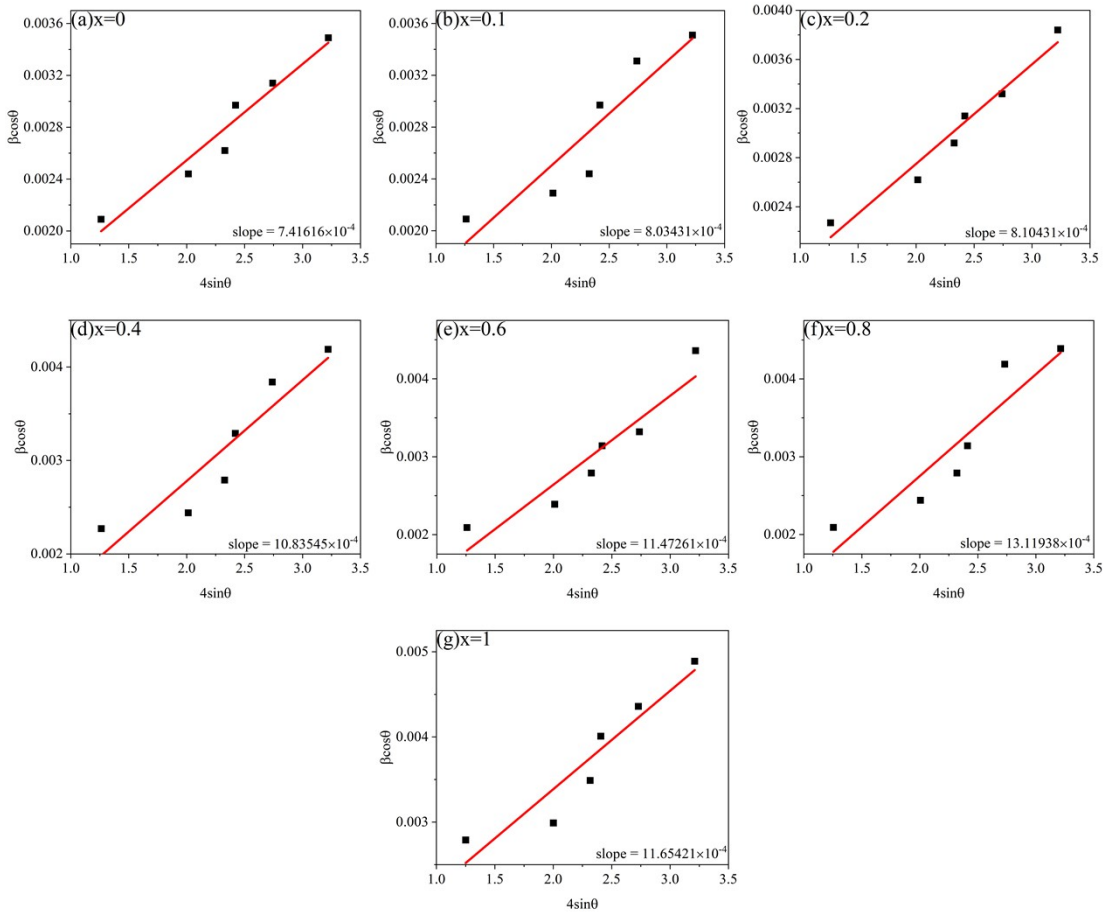

Fig. S2. Williamson-Hall plots of x= (a) 0, (b) 0.1, (c) 0.2, (d) 0.4, (e) 0.6, (f) 0.8, (g) 1 for NiZnCo ferrites.

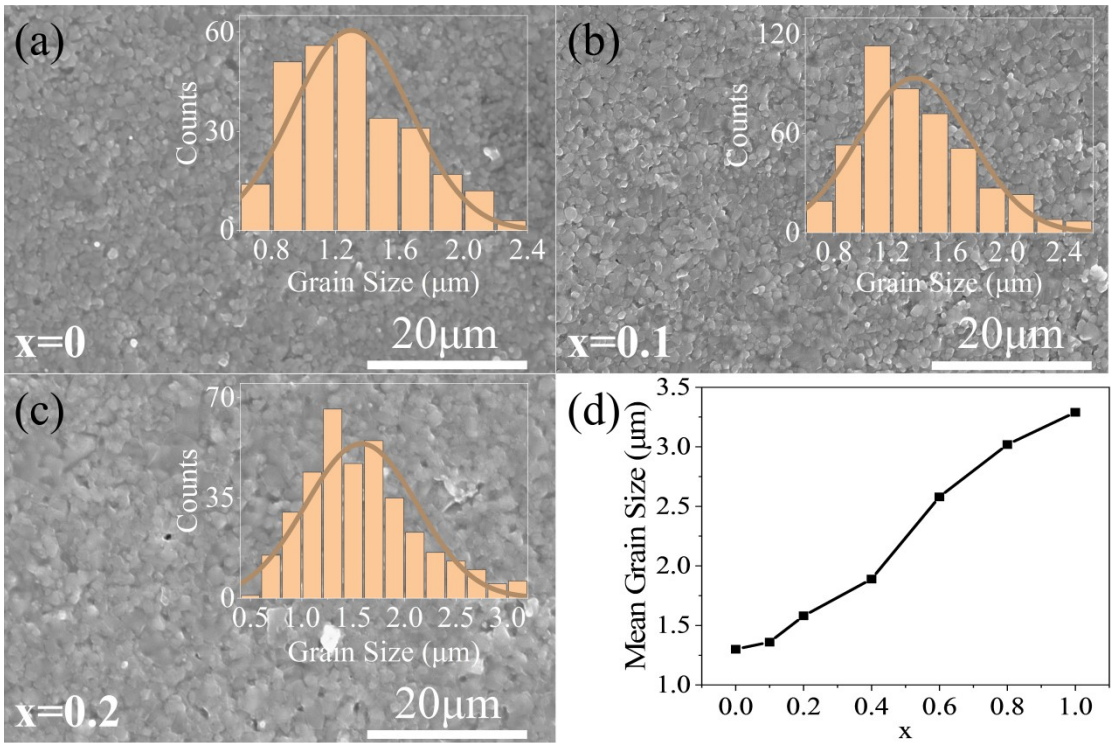

Fig. S3. SEM images of x = (a) 0, (b) 0.1, (c) 0.2 for NiZnCo ferrites, respectively. (d) Variation of mean grain size as a function of Co concentration in NiZnCo ferrites.

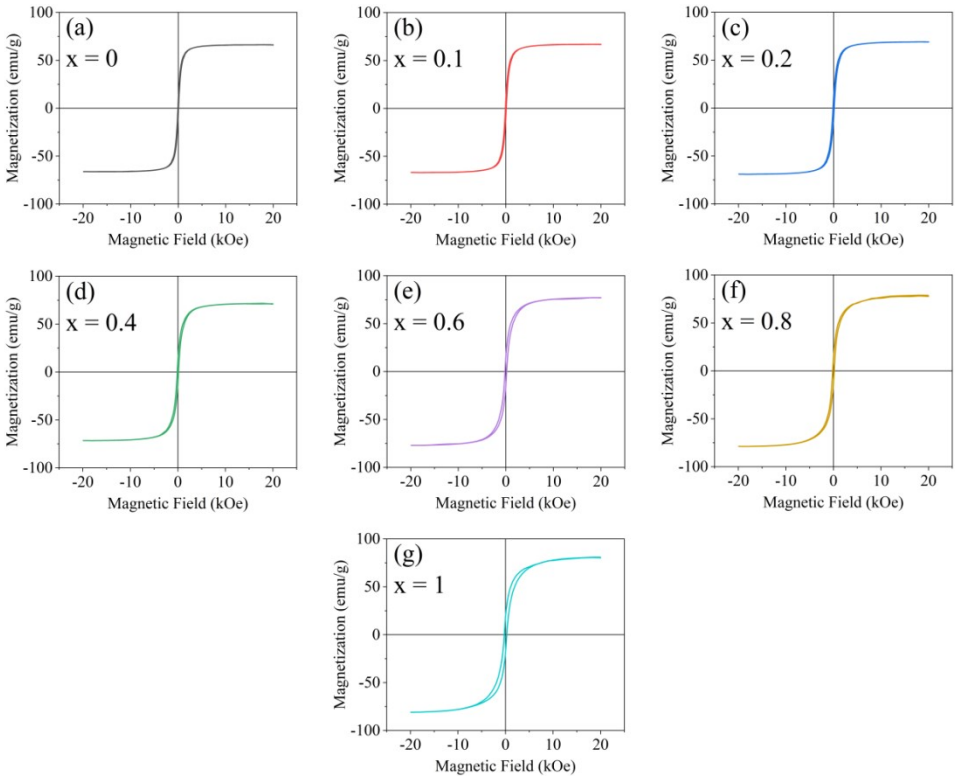

Fig. S4. Magnetic hysteresis loops for NiZnCo ferrites with x = (a) 0, (b) 0.1, (c) 0.2, (d) 0.4, (e) 0.6, (f) 0.8, (g) 1, respectively.

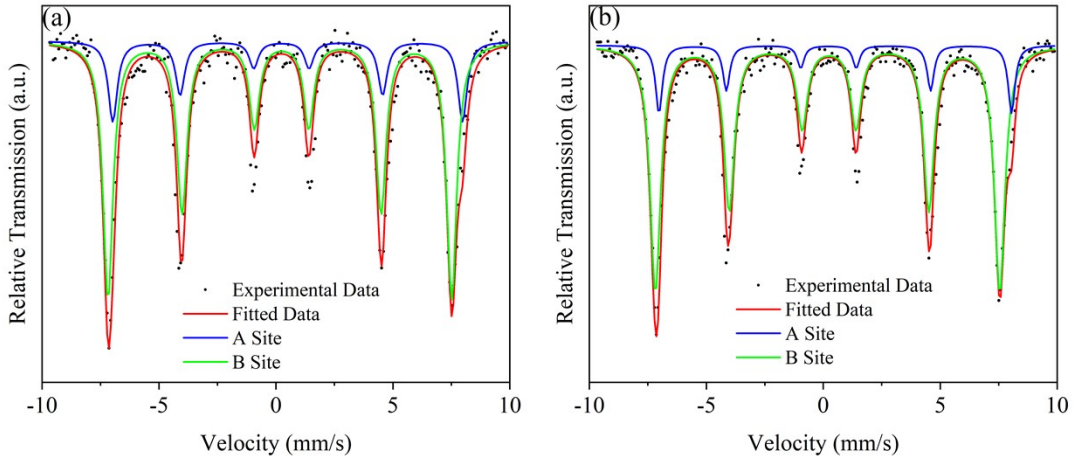

Fig. S5. Mössbauer spectroscopy for NiZnCo ferrites with x = (a) 0.4, (b) 0.6, respectively.

Table S1. Mössbauer parameters of NiZnCo ferrites (x=0.4, x=0.6) and the corresponding occupancy of Fe^{3+} at the A and B sites.

x	Site	Isomer shift (mm/s)	Hyperfine field (T)	Line width (mm/s)	Area (%)	Occupancy ratio
x=0.4	A	0.36726	46.46562	0.47051	21.96	0.46
	B	0.20468	45.66598	0.52228	78.04	1.54
x=0.6	A	0.36909	46.83424	0.35352	15.16	0.32
	B	0.21620	45.69110	0.54510	84.84	1.68