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Quaternary ferrites by batch and continuous flow hydrothermal synthesis: a comparison

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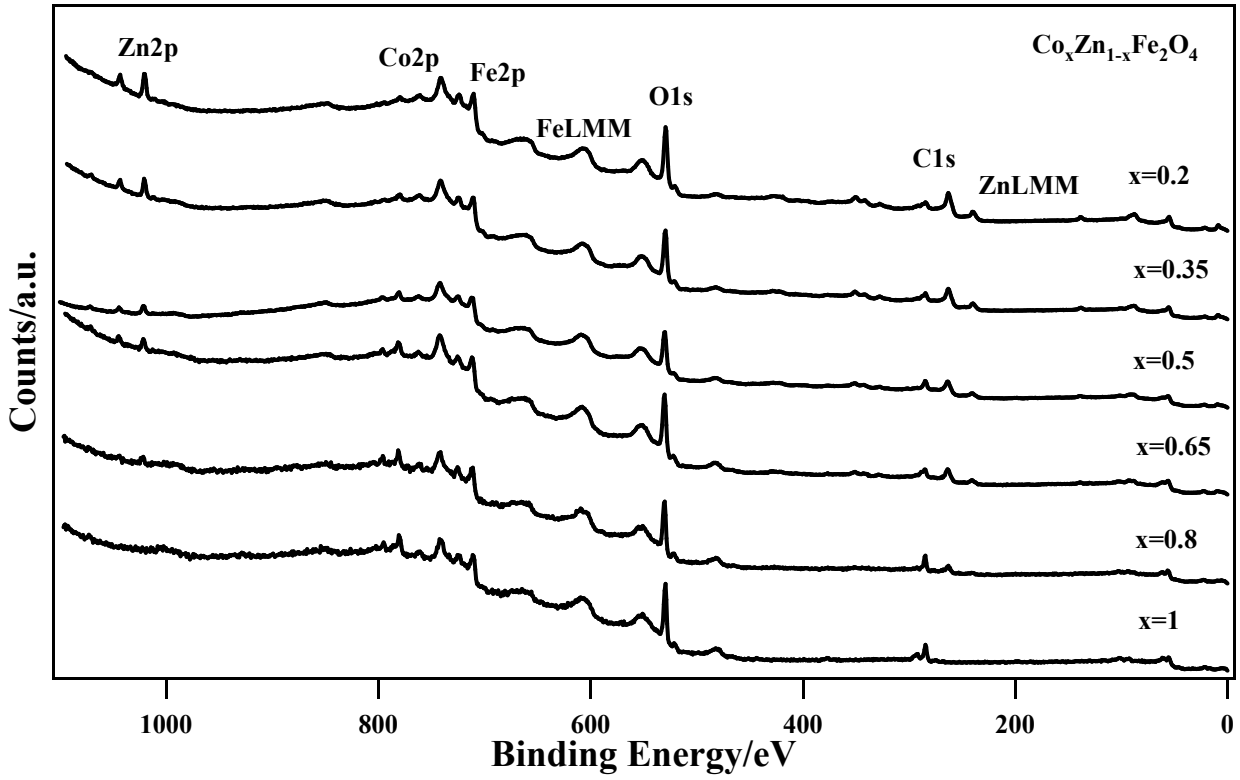

Figure S1 Survey XPS scans of $Co_xZn_{1-x}Fe_2O_4$ samples synthesised by CHFS (binding energies corrected for surface charging)

Sample	Formula	C	O	Co	Zn	Fe	Co/Zn	(Co+Zn)/Fe
CF01	$Co_{0.2}Zn_{0.8}Fe_2O_4$	13.3	59.6	2.0	6.7	18.4	0.30	0.47
CF02	$Co_{0.35}Zn_{0.65}Fe_2O_4$	14.2	60.2	2.7	5.2	17.8	0.52	0.44
CF03	$Co_{0.5}Zn_{0.5}Fe_2O_4$	27.5	54.4	3.1	2.5	12.6	1.22	0.44
CF04	$Co_{0.65}Zn_{0.35}Fe_2O_4$	11.4	61.1	7.0	3.5	17.0	2.00	0.62
CF05	$Co_{0.8}Zn_{0.2}Fe_2O_4$	27.5	50.7	6.4	1.4	13.9	4.46	0.56
CFCo	$CoFe_2O_4$	27.3	53.6	7.4	N/A	11.6	N/A	0.64
HT01	$Co_{0.2}Zn_{0.8}Fe_2O_4$	13.3	15.8	3.4	14.1	17.4	0.24	1.01
HT02	$Co_{0.35}Zn_{0.65}Fe_2O_4$	20.5	49.7	2.6	9.3	17.9	0.28	0.66
HT03	$Co_{0.5}Zn_{0.5}Fe_2O_4$	13.3	56.6	4.5	6.9	18.7	0.65	0.61
HT04	$Co_{0.65}Zn_{0.35}Fe_2O_4$	11.0	56.8	7.0	5.0	20.2	1.4	0.59
HT05	$Co_{0.8}Zn_{0.2}Fe_2O_4$	11.3	57.2	9.0	3.0	19.6	3.0	0.61
HTCo	$CoFe_2O_4$	11.1	58.4	10.6	N/A	19.9	N/A	0.53

Table S2 Surface composition (atomic %) of the samples obtained through XPS