

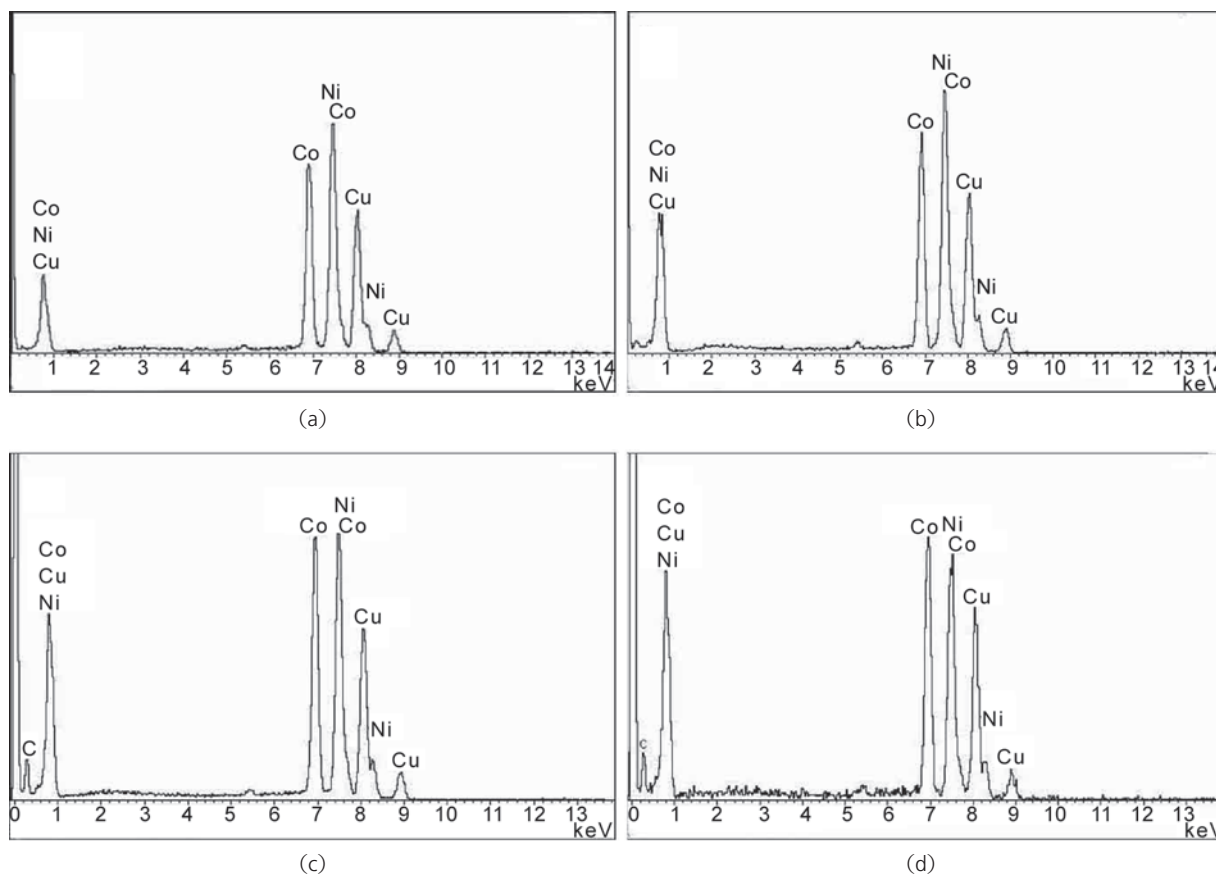
Electronic Supplementary Material

Magnetic Field-Induced Solvothermal Synthesis of One-Dimensional Assemblies of Ni–Co Alloy Microstructures

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**Figure S-1** Energy-dispersive X-ray spectra (EDS) of four different $\text{Ni}_{0.5}\text{Co}_{0.5}$ products**Table S-1** Composition of $\text{Ni}_{0.5}\text{Co}_{0.5}$ particles

Data groups	Element	Peak area	Area sigma	K factor	Revised Abs.	Weight percentage	Weight percentage sigma	Percentage of atoms
(a)	Co K	8013	161	1.059	1.000	47.19	0.71	47.10
	Ni K	8923	178	1.064	1.000	52.81	0.71	52.90
(b)	Co K	13 143	206	1.059	1.000	46.33	0.54	46.24
	Ni K	15 151	231	1.064	1.000	53.67	0.54	53.76
(c)	Co K	17 951	240	1.059	1.000	50.35	0.49	50.26
	Ni K	17 615	250	1.064	1.000	49.65	0.49	49.74
(d)	Co K	2835	96	1.059	1.000	52.79	1.26	52.69
	Ni K	2524	95	1.064	1.000	47.21	1.26	47.31



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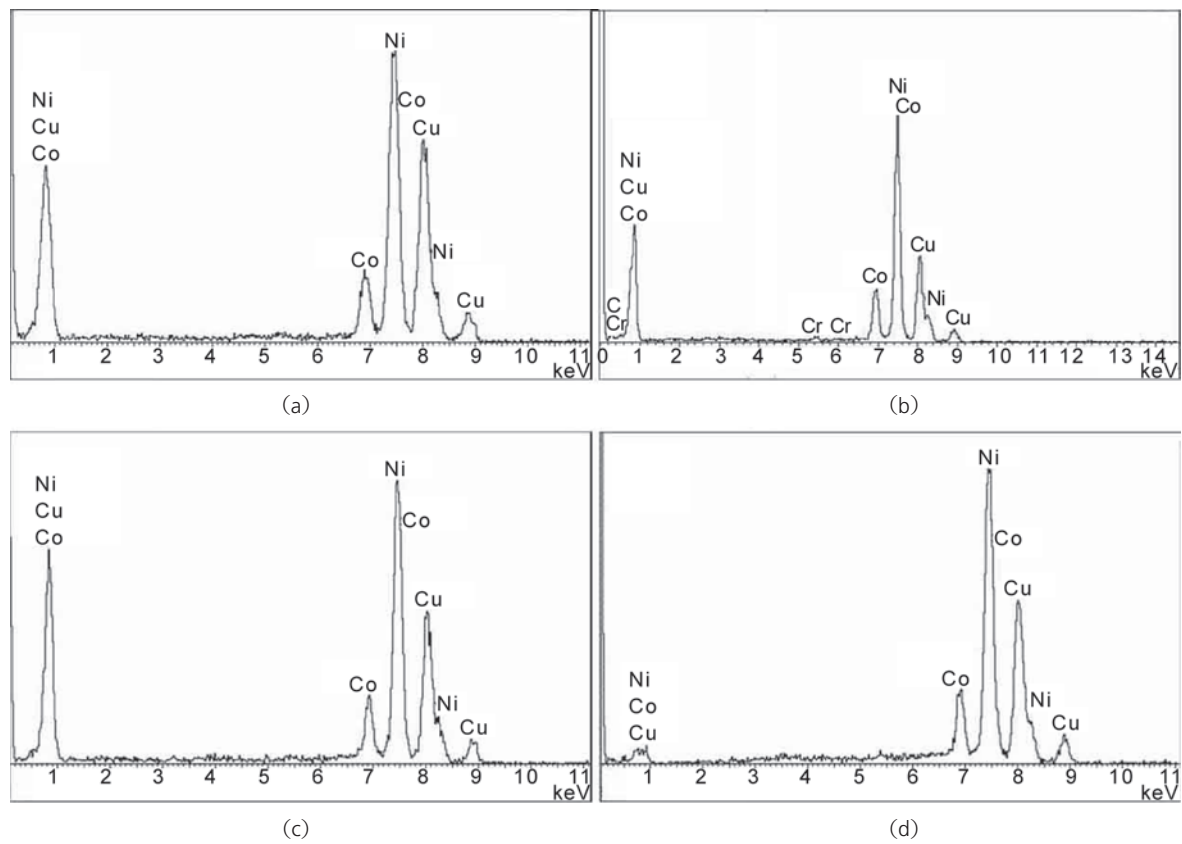


Figure S-2 EDS of four different Ni₈₀Co₂₀ products

Table S-2 Composition of Ni_{0.8}Co_{0.2} particles

Data groups	Element	Peak area	Area sigma	K factor	Revised Abs.	Weight percentage	Weight percentage sigma	Percentage of atoms
(a)	Co K	1649	87	1.059	1.000	18.33	0.86	18.27
	Ni K	7313	161	1.064	1.000	81.67	0.86	81.73
(b)	Co K	1583	79	1.059	1.000	20.25	0.88	20.19
	Ni K	6204	139	1.064	1.000	79.75	0.88	79.81
(c)	Co K	1247	74	1.059	1.000	17.23	0.91	17.18
	Ni K	5961	140	1.064	1.000	82.77	0.91	82.82
(d)	Co K	1475	82	1.059	1.000	19.91	0.96	19.85
	Ni K	5902	143	1.064	1.000	80.09	0.96	80.15

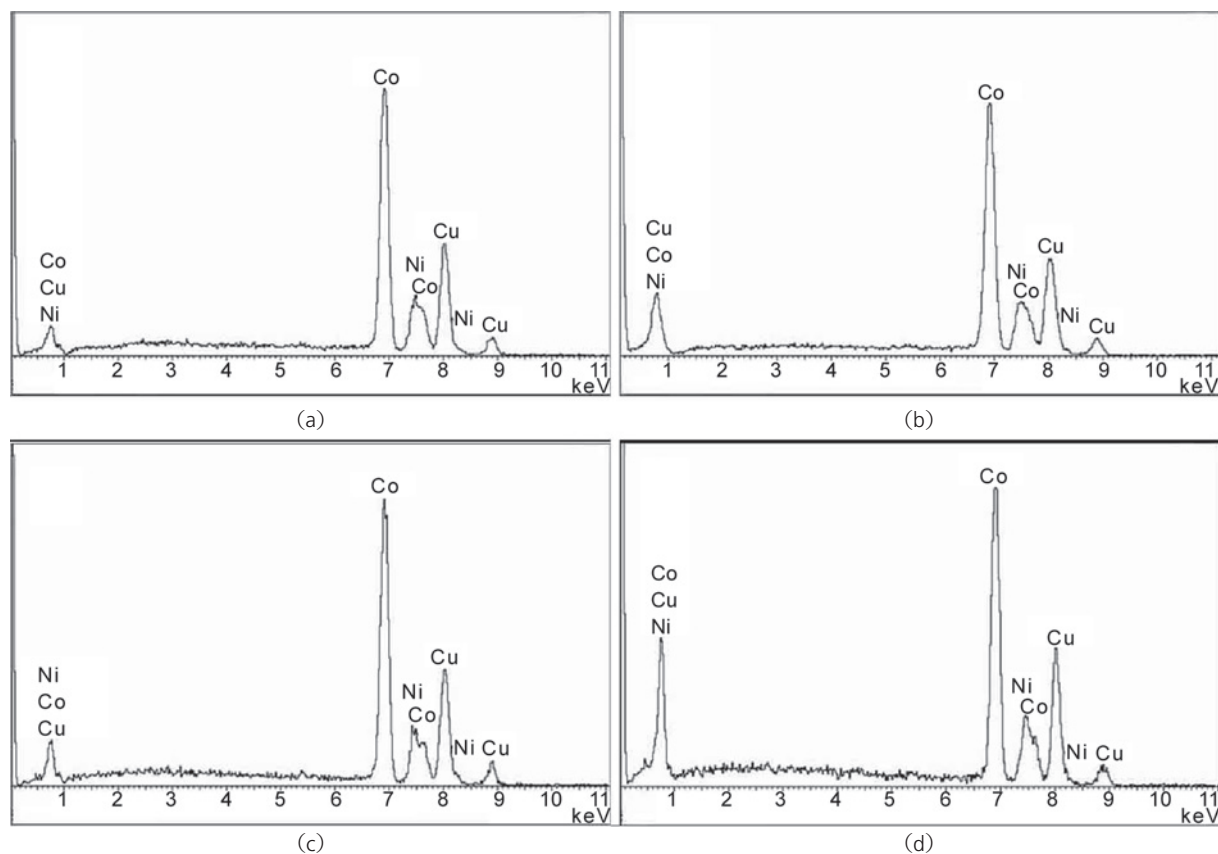


Figure S-3 EDS of four different $\text{Ni}_{0.2}\text{Co}_{0.8}$ products

Table S-3 Composition data of $\text{Ni}_{0.2}\text{Co}_{0.8}$ particles

Data groups	Element	Peak area	Area sigma	K factor	Revised Abs.	Weight percentage	Weight percentage sigma	Percentage of atoms
(a)	Co K	17801	234	1.059	1.000	86.67	0.60	86.62
	Ni K	2725	137	1.064	1.000	13.33	0.60	13.38
(b)	Co K	22069	268	1.059	1.000	84.35	0.55	84.30
	Ni K	4074	164	1.064	1.000	15.65	0.55	15.70
(c)	Co K	9495	173	1.059	1.000	86.25	0.77	86.20
	Ni K	1507	95	1.064	1.000	13.75	0.77	13.80
(d)	Co K	7010	148	1.059	1.000	84.85	0.95	84.80
	Ni K	1246	88	1.064	1.000	15.15	0.95	15.20

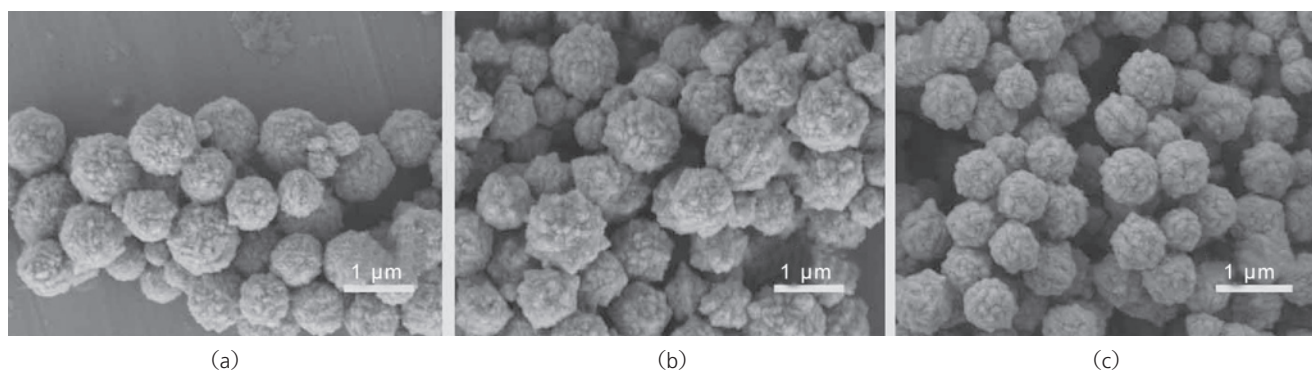


Figure S-4 SEM images of $\text{Ni}_{0.5}\text{Co}_{0.5}$ synthesized in 1,2-propanediol with different reaction times: (a) 6 h; (b) 12 h; (c) 20 h. $[\text{NaOH}] = 0.1 \text{ mol/L}$, 170°C

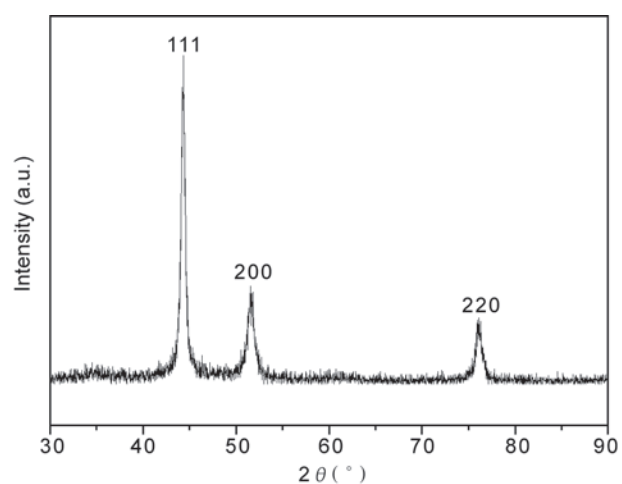


Figure S-5 XRD pattern of $\text{Co}_{0.5}\text{Ni}_{0.5}$ powder prepared at 170°C by reduction in 1,2-propanediol for 20 h when the concentration of NaOH was 1 mol/L

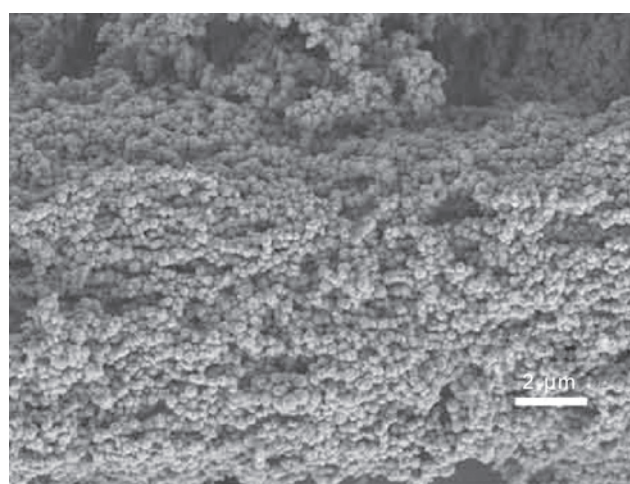


Figure S-6 SEM image of $\text{Ni}_{0.5}\text{Co}_{0.5}$ particles prepared in the presence of DBS without addition of sodium hydroxide. Addition of DBS leads to a significant decrease in particle size