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Continuous and large-scale synthesis of Ni-Co PBA nanoparticles with tunable particle size by microreactor

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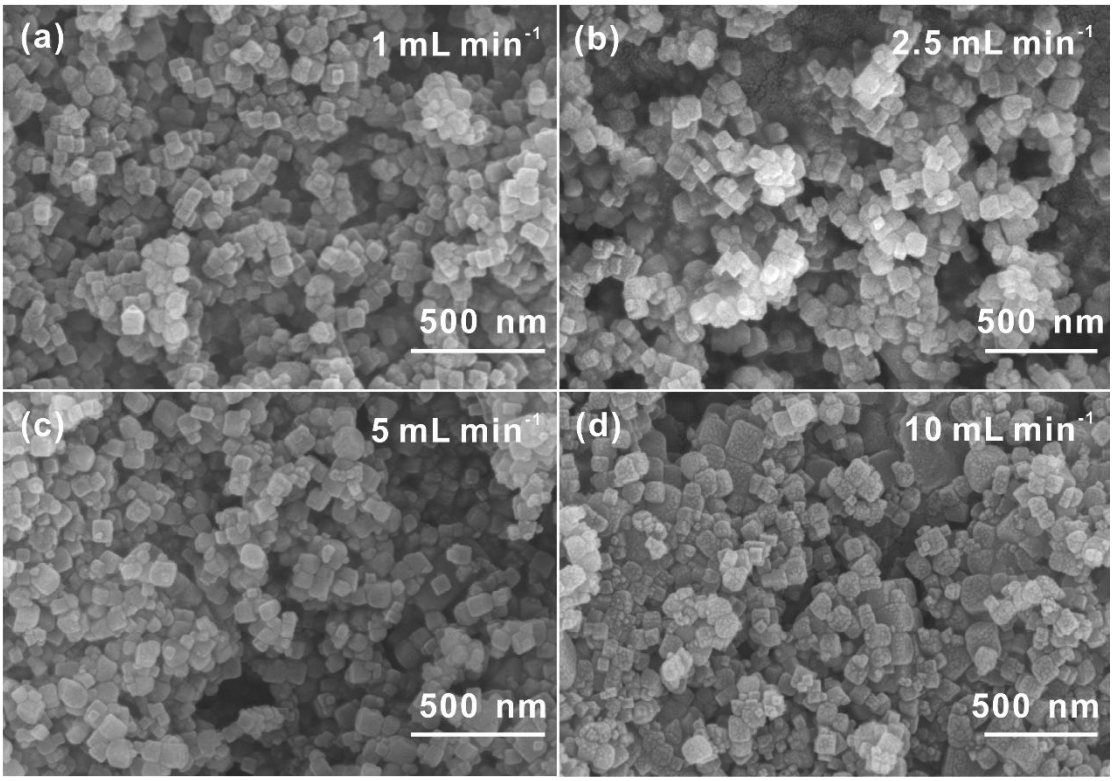

Figure S1. SEM images of Ni-Co PBA-4# nanoparticles. Ni-Co PBA nanoparticles obtained at feed flow rates of (a) 1 mL min^{-1}, (b) 2.5 mL min^{-1}, (c) 5 mL min^{-1}, (d) 10 mL min^{-1}.

Table S1

Different parameters for the preparation of Ni-Co PBA nanoparticles in the stirring-mix method.

Compounds	Amount of substance (mmol)			T (℃)
	A		B	
	$Ni(NO_3)_2 \cdot 6H_2O$	$Na_3C_6H_5O_7 \cdot 2H_2O$	$K_3[Co(CN)_6]$	
Ni-Co PBA-1#	1.8	2.7	1.2	25
Ni-Co PBA-2#	3.6	5.4	2.4	25
Ni-Co PBA-3#	5.4	8.1	3.6	25
Ni-Co PBA-4#	7.2	10.8	4.8	25

Table S2

Different parameters for the preparation of Ni-Co PBA nanoparticles in the continuous flow microreactor.

Compounds	Amount of substance (mmol)			Pressure (MPa)	Flow rate (mL min^{-1})	Residence time (min)
	A		B			
	$Ni(NO_3)_2·6H_2O$	$Na_3C_6H_5O_7·2H_2O$	$K_3[Co(CN)_6]$			
Ni-Co PBA-1#-2	1.8	2.7	1.2	0.39	2	30
Ni-Co PBA-1#-4	1.8	2.7	1.2	0.38	4	15
Ni-Co PBA-1#-6	1.8	2.7	1.2	0.37	6	10
Ni-Co PBA-1#-8	1.8	2.7	1.2	0.34	8	7.5
Ni-Co PBA-1#-10	1.8	2.7	1.2	0.37	10	6
Ni-Co PBA-1#-12	1.8	2.7	1.2	0.57	12	5
Ni-Co PBA-1#-14	1.8	2.7	1.2	0.59	14	4.3
Ni-Co PBA-1#-16	1.8	2.7	1.2	0.62	16	3.75
Ni-Co PBA-2#-2	3.6	5.4	2.4	0.82	2	30
Ni-Co PBA-2#-4	3.6	5.4	2.4	0.41	4	15
Ni-Co PBA-2#-6	3.6	5.4	2.4	0.43	6	10
Ni-Co PBA-2#-8	3.6	5.4	2.4	0.46	8	7.5
Ni-Co PBA-2#-10	3.6	5.4	2.4	0.53	10	6
Ni-Co PBA-2#-12	3.6	5.4	2.4	0.57	12	5
Ni-Co PBA-2#-14	3.6	5.4	2.4	0.63	14	4.3
Ni-Co PBA-2#-16	3.6	5.4	2.4	0.87	16	3.75
Ni-Co PBA-3#-2	5.4	8.1	3.6	0.36	2	30
Ni-Co PBA-3#-4	5.4	8.1	3.6	0.37	4	15
Ni-Co PBA-3#-6	5.4	8.1	3.6	0.41	6	10
Ni-Co PBA-3#-8	5.4	8.1	3.6	0.36	8	7.5
Ni-Co PBA-3#-10	5.4	8.1	3.6	0.44	10	6
Ni-Co PBA-3#-12	5.4	8.1	3.6	0.58	12	5
Ni-Co PBA-3#-14	5.4	8.1	3.6	0.71	14	4.3
Ni-Co PBA-3#-16	5.4	8.1	3.6	0.97	16	3.75