Supporting Information for

MOF-Derived Ni$_{1-x}$Co$_x$@Carbon with Tunable Nano-Micro Structure as Lightweight and Highly Efficient Electromagnetic Wave Absorber

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Supplementary Table and Figures

Table S1 Information of MOF-derived Ni$_{1-x}$Co$_x$@Carbon composites

Sample	Size (um)	I$_D$/I$_G$	Ms (emu/g)
Ni@C	1.5~2	0.92	138.5
Ni$_{0.8}$Co$_{0.2}$@C	3	1.06	131.4
Ni$_{0.5}$Co$_{0.5}$@C	8	0.95	121.1
Ni$_{0.2}$Co$_{0.8}$@C	10	0.98	100.7
CoO@C	30	-	47.2
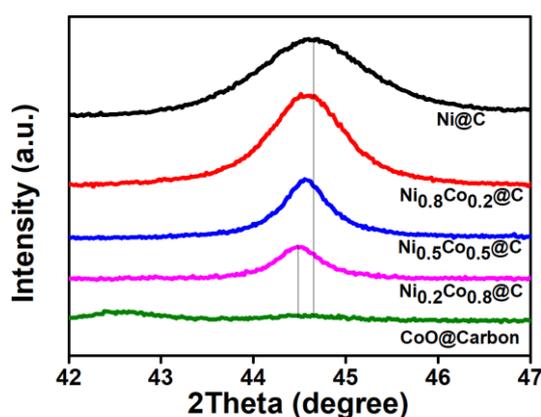
Fig. S1 XRD of obtained Ni$_{1-x}$Co$_x$@Carbon composites
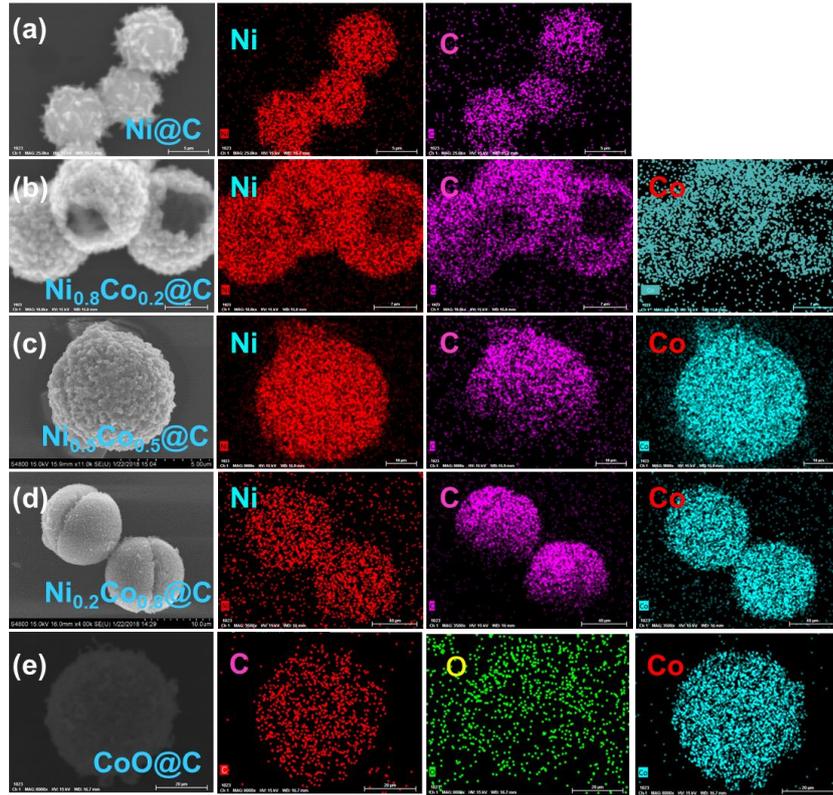
Fig. S2 Elements mapping distribution of (**a**) Ni@C, (**b**) Ni$_{0.8}$Co$_{0.2}$@C, (**c**) Ni$_{0.5}$Co$_{0.5}$@C, (**d**) Ni$_{0.2}$Co$_{0.8}$@C, and (**e**) CoO@C composites.
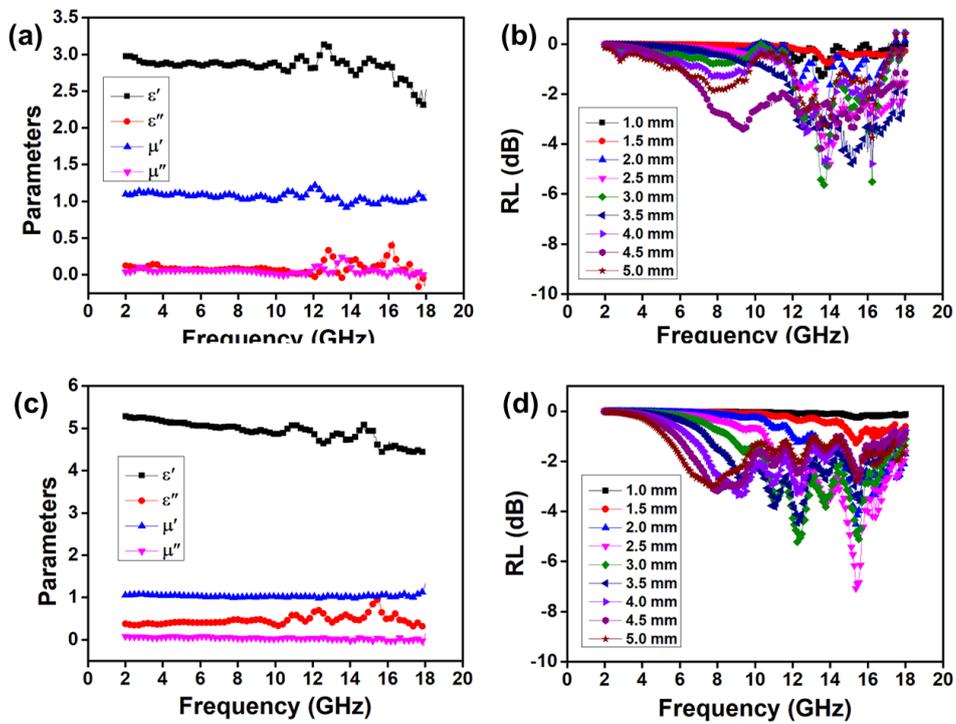

Fig. S3 Electromagnetic parameters (**a, c**) and microwave absorption (**b, d**) of obtained CoO@C composites at 25% and 40% mass adding, respectively
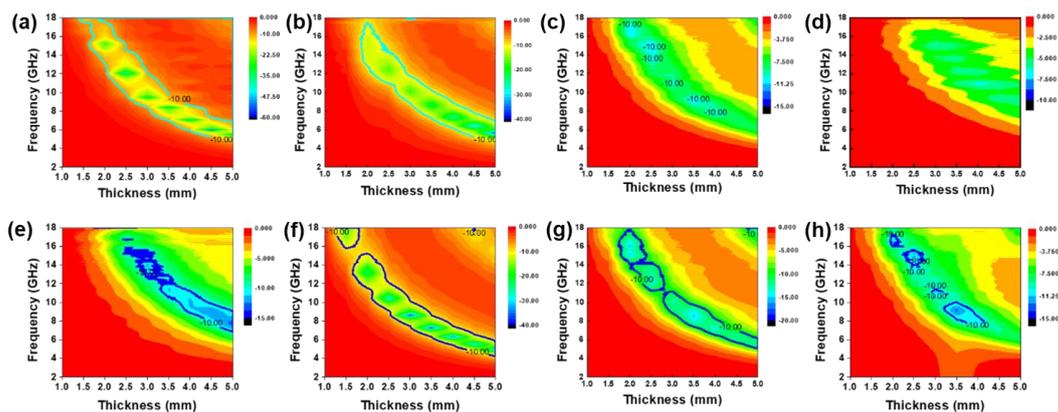
Fig. S4 Efficient absorption areas of (**a, e**) Ni@C, (**b, f**) $Ni_{0.8}Co_{0.2}$@C, (**c, g**) $Ni_{0.5}Co_{0.5}$@C, (**d, h**) and $Ni_{0.2}Co_{0.8}$@C composites at 25% and 40% mass adding, respectively
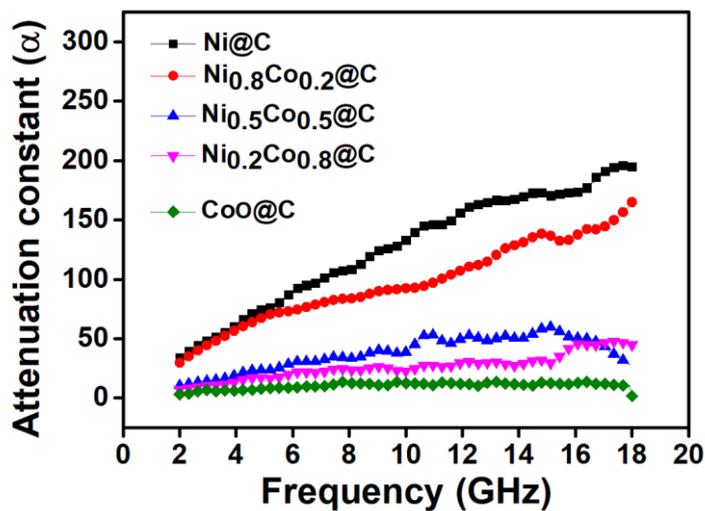

Fig. S5 Attenuation constant α of MOF-derived $Ni_{1-x}Co_x$@C composites