Electronic Supplementary Material (ESI) for New Journal of Chemistry.

Hierarchical Co/CoO/FeO/C Nanocomplex Derived from $Co(OH)_2$@NH_2-MIL-88 toward Highly Efficient Microwave Absorption

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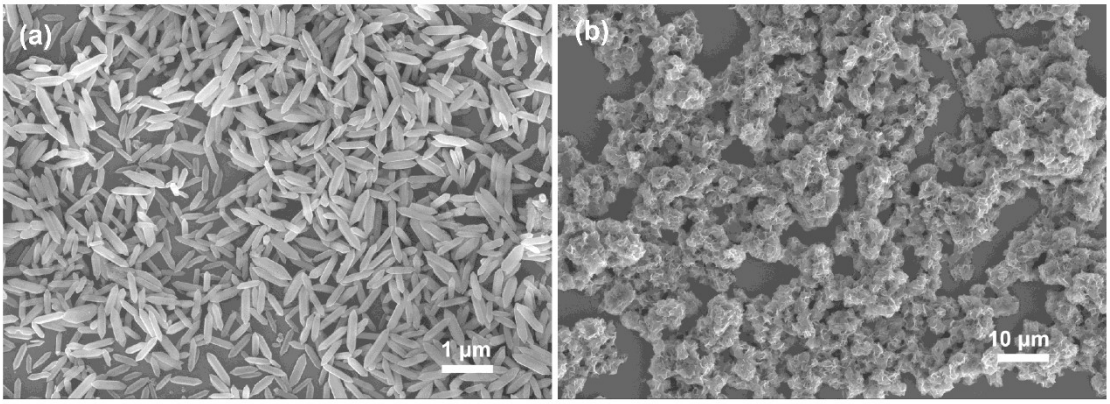

Figure S1. The SEM images of NH_2-MIL-88B (a) and $Co(OH)_2$@NH_2-MIL-88B (b).

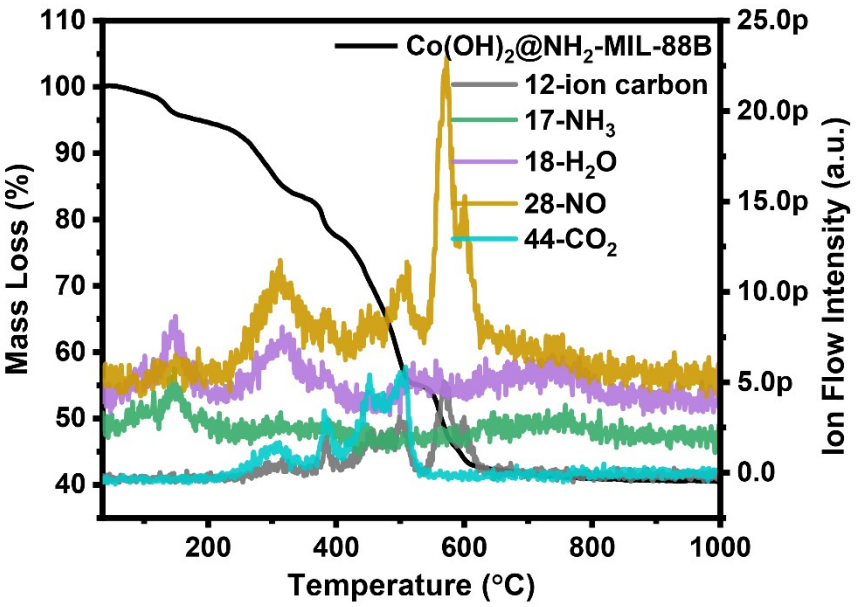

Figure S2. The TGA-MS curves of $Co(OH)_2$@NH_2-MIL-88B.

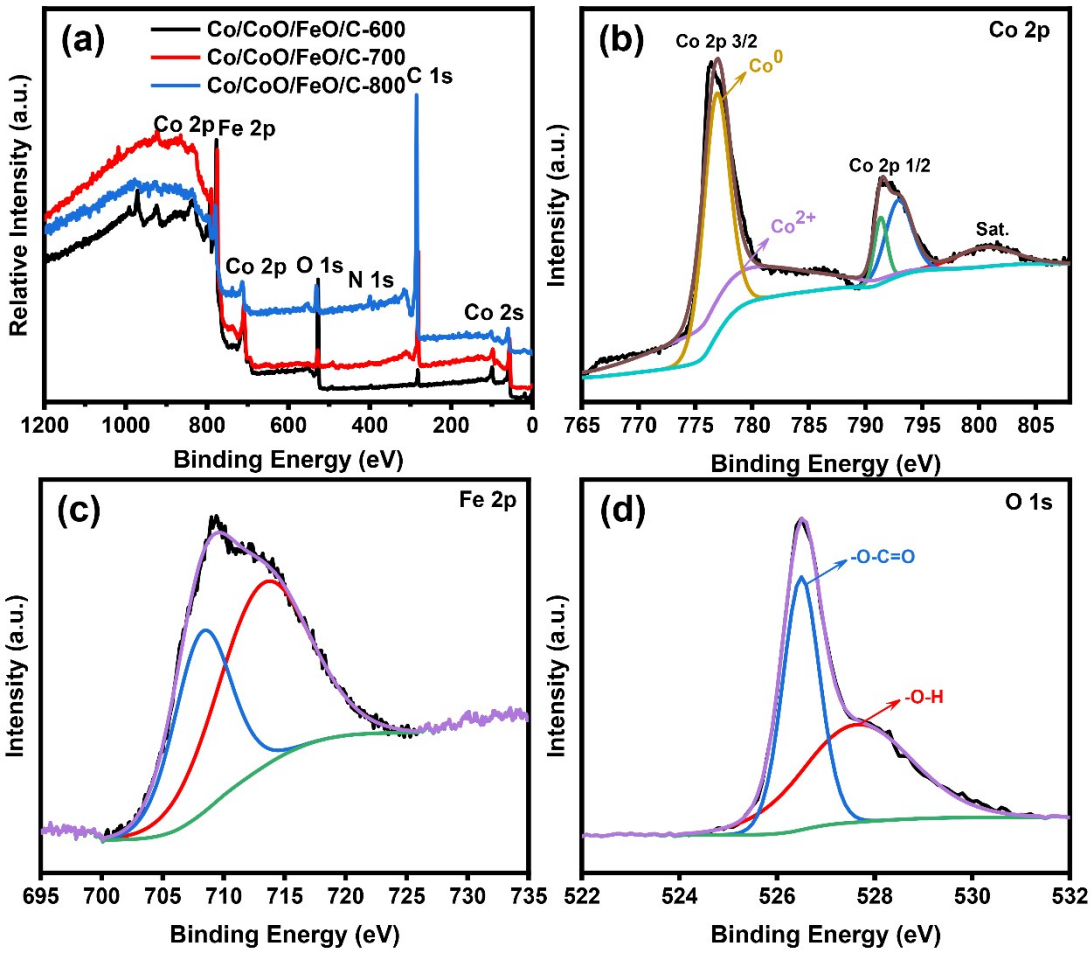

Figure S3. The XPS survey and convolution spectra of Co/CoO/FeO/C-600.

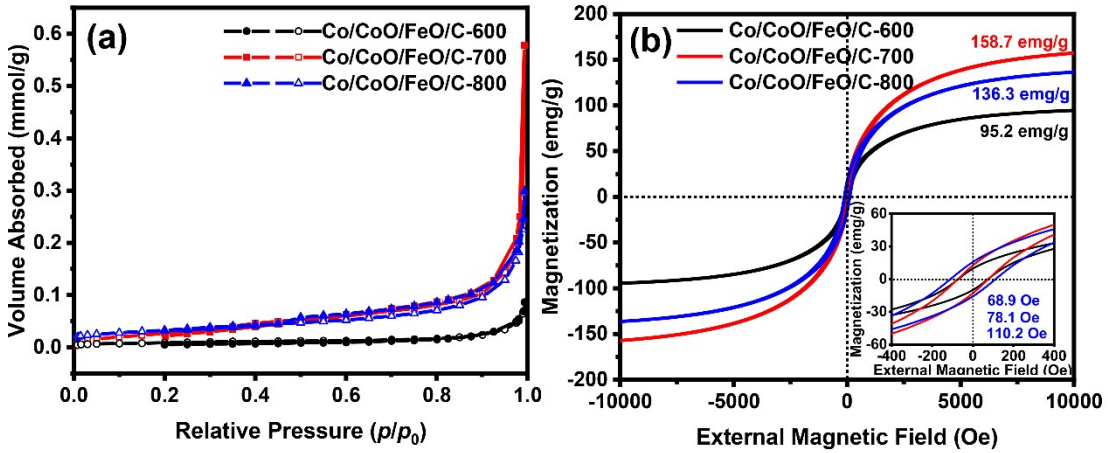

Figure S4. The characterization of Co/CoO/FeO/C-600/700/800. (a) 77 K N_2 sorption-desorption, (b) *M*-*H* curves

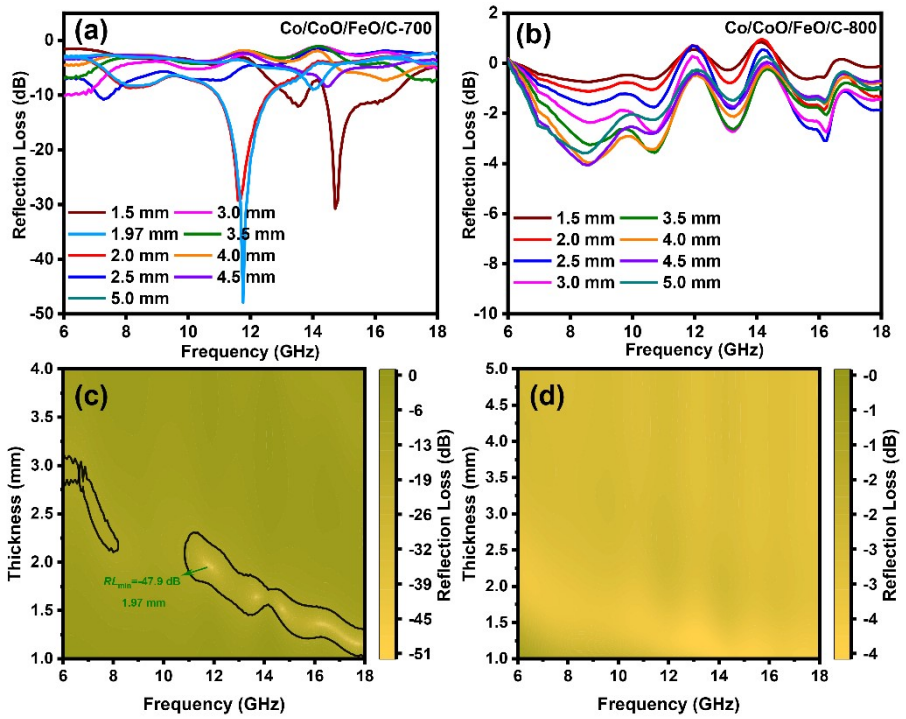

Figure S5. The microwave absorption performance of Co/CoO/FeO/C-700/800. (a) (c) 2D and 3D *RL* curves of Co/CoO/FeO/C-700, (b) (d) 2D and 3D *RL* curves of Co/CoO/FeO/C-800.

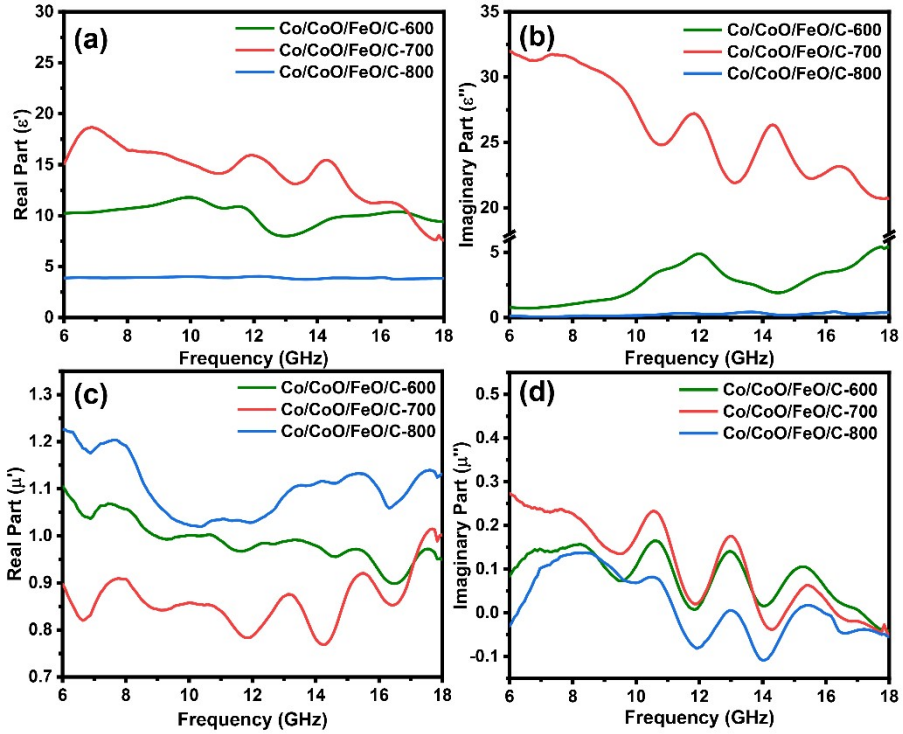

Figure S6. electromagnetic parameters of Co/CoO/FeO/C-600, Co/CoO/FeO/C-700, Co/CoO/FeO/C-800, respectively.

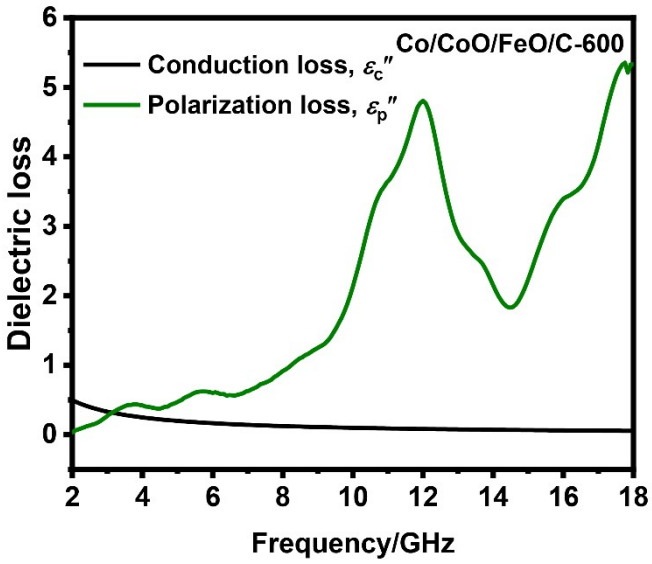

Figure S7. The contribution of the dielectric loss for Co/CoO/FeO/C-600.

Table S1 MA performance of multicomponent complex as MAMs

Name	RL_{min} (dB)	*d* (mm)	EAB (GHz)	Loading (%)	Ref.
Fe/MnO@C	-45.0	2.0	5.0	50	1
NiCo@C/ZnO	-60.97	2.0	6.08	33	2
CoFe alloys@ZnO@C	-40.63	2.2	5.84 (2.4 mm)	30	3
$CoFe_2O_4$/CoFe@C	-51	5.9	2.17	30	4
Co/MnO@C	-55.3	2.4	4.6	80	5
Co@ZnO@NC	-61.9	2.3	5.5	30	6
Ni/NiO/C	-47.72	1.9	5.67	40	7
$ZnFe_2O_4$@SiO_2@C	-54.29	3.39	5.66	30	8
Co/CoO/FeO/C-600	−45.5	2.01	4.7	30	This study

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