Well-Dispersed CoNiO₂ Nanosheet/CoNi Nanocrystal Arrays Anchored onto Monolayer MXene for Superior Electromagnetic Absorption at Low Frequencies

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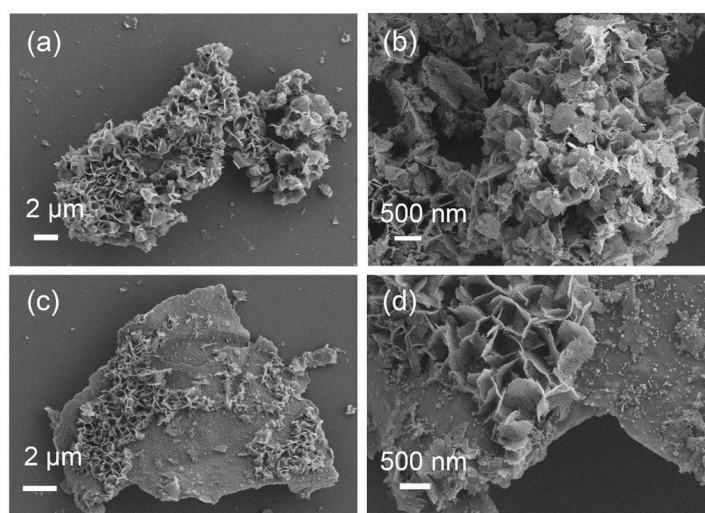* Correspondence: xurenxin@whut.edu.cn (R.X.); daniellliu@whut.edu.cn (D.L.)

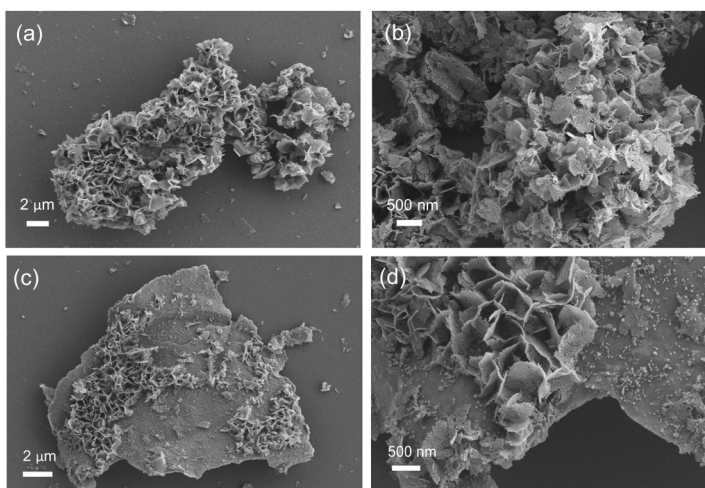**Figure S1.** SEM images of (a,b) L–MCNO and (c,d) H–MCNO.
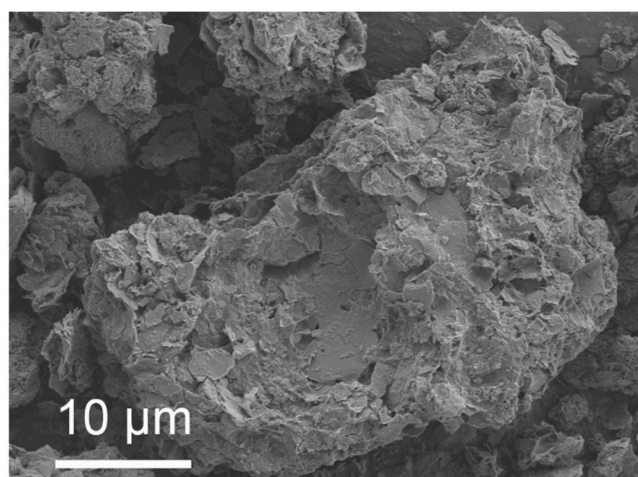

Figure S2. SEM image of CoNi hydrate.

Figure S3. SEM image of M/CNO.

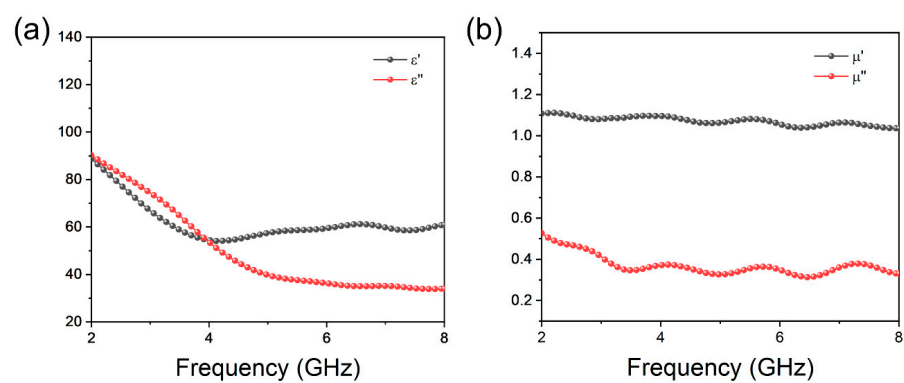**Figure S4.** (a) ε' and ε'', and (b) μ' and μ'' curves of neat Mxene.
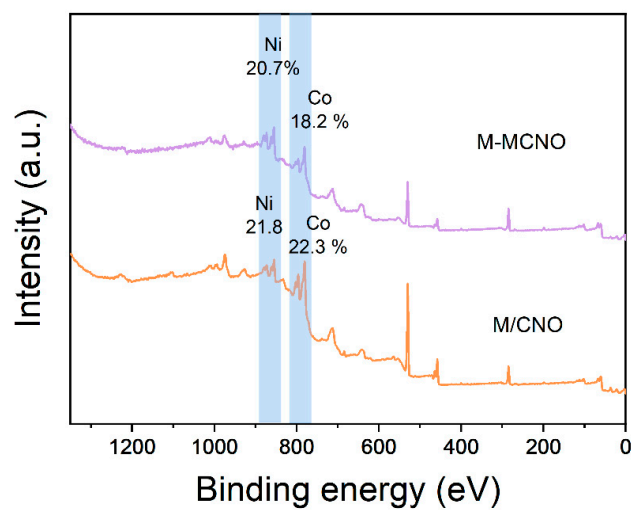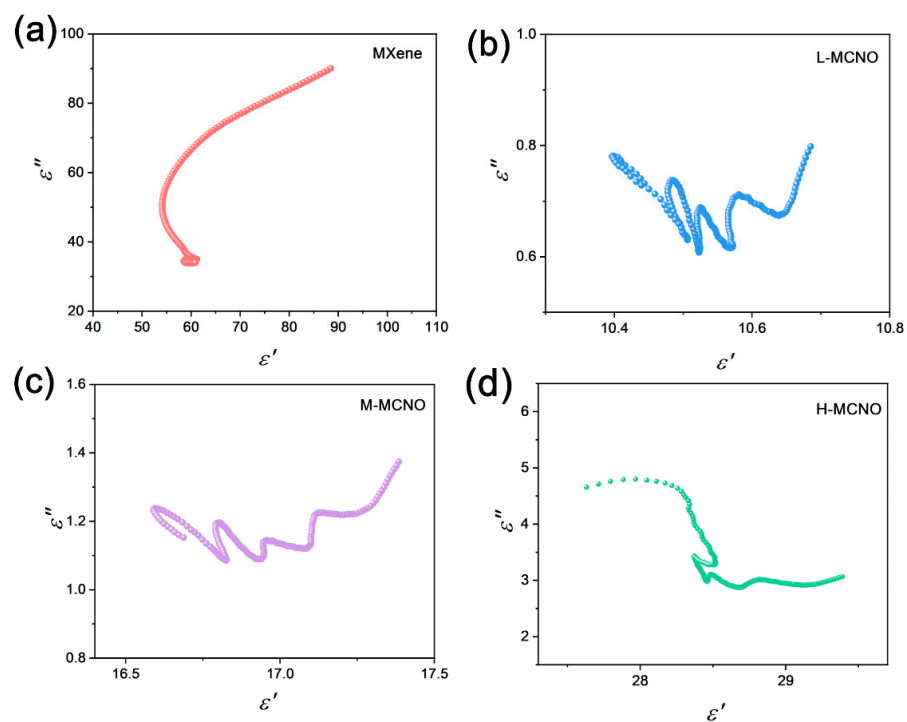

Figure S5. XPS surveys of M–MCNO and M/CNO.

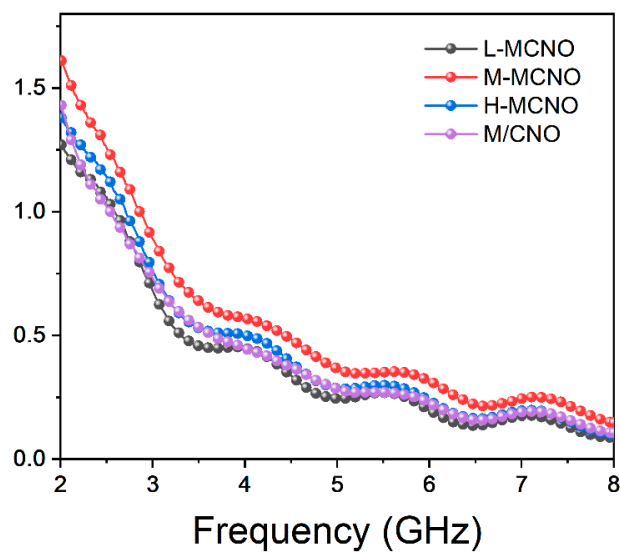**Figure S6.** ε′-ε″ plots of (a) neat MXene, (b) L–MCNO, (c) M–MCNO, and (d) H–MCNO.

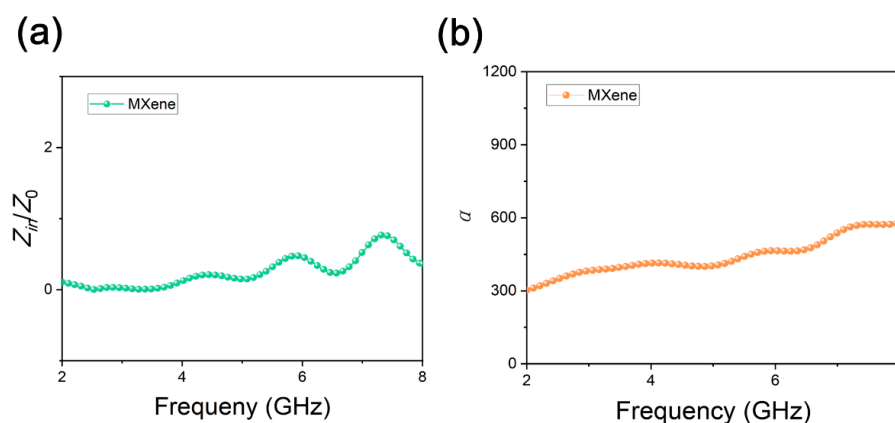**Figure S7.** C0 of L–, M–, H–MCNO and M/CNO.

Figure S8. (a) Z_{in}/Z_0 and (b) α of Mxene.

Table S1. Comparison of microwave absorption properties of M–MCNO hybrid with recently reported dielectric-magnetic composites

	Absorbers	RL$_{min}$ (dB)	Frequency (GHz)	EAB (GHz)	Ref.
a	xNi/yNiO/rGO	−46.5	3.7	0.9	[1]
b	Fe$_3$O$_4$/rGO	−33.0	3.9	0.8	[2]
c	CNT@BaTiO$_3$@PANI	−22.3	3.7	1.5	[3]
d	Fe/MXene	−40.3	4.9	1.4	[4]
e	Mn-Zn-Fe/C	−28.8	3.9	0.5	[5]
f	SiC/FeNi/C	−26.2	3.4	0.4	[6]
g	NiAl–LDH/graphene	−16.3	5.6	0.6	[7]
h	BaTiO$_3$/MWCNTs	−33.5	6.8	0.5	[8]
i	Co/ZnO/C	−21.6	5.5	1.8	[9]
j	Ni^{2+}@GO/lignin	−39.2	4.6	1.3	[10]
	M-MCNO	−45.3	3.24	1.48	This work

Supplementary references

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