Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Supplementary Material

Electrostatic self-assembled two-dimensional magnetized MXene/hollow Fe_3O_4 nanoparticle hybrids with high electromagnetic absorption performance and improved impendence matching

Baiwen Deng, Zhicheng Liu, Fei Pan, Zhen Xiang, Xian Zhang, Wei Lu*

Shanghai Key Lab. of D&A for Metal-Functional Materials, School of Materials Science & Engineering, Tongji University, Shanghai 201804, China.

*Corresponding authors. E-mail address: weilu@tongji.edu.cn (Wei Lu)

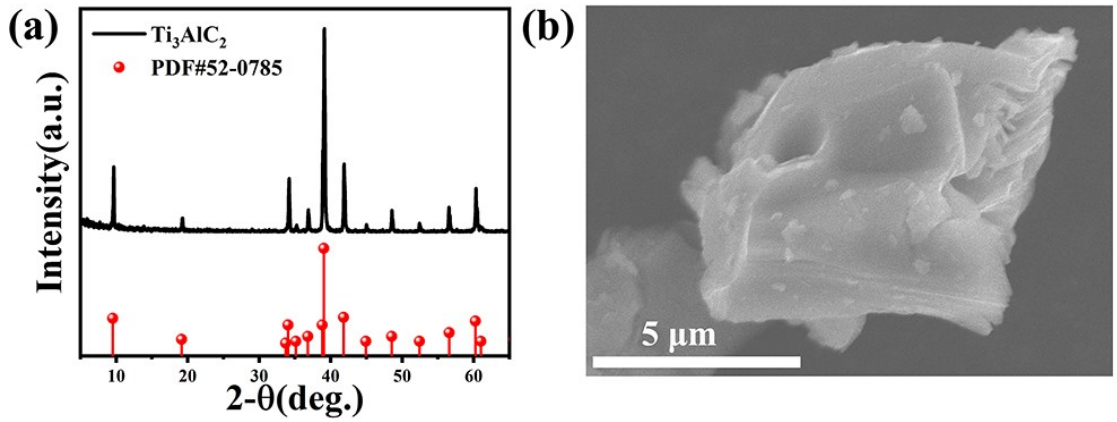

Fig.S1 (a)XRD pattern and (b) SEM image of of Ti_3AlC_2

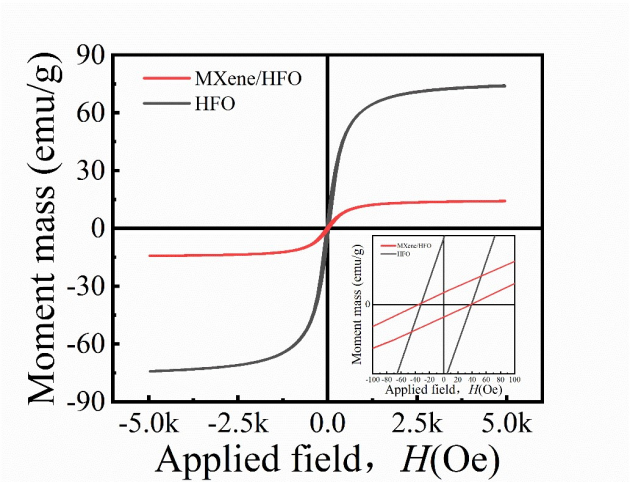

Fig.S2 The magnetic hysteresis loops of HFO and MXene/HFO hybrids

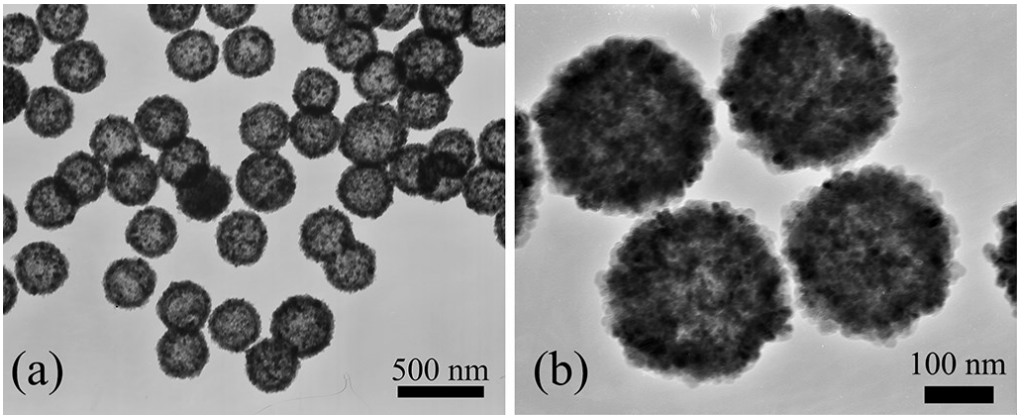

Fig.S3 TEM images for HFO.

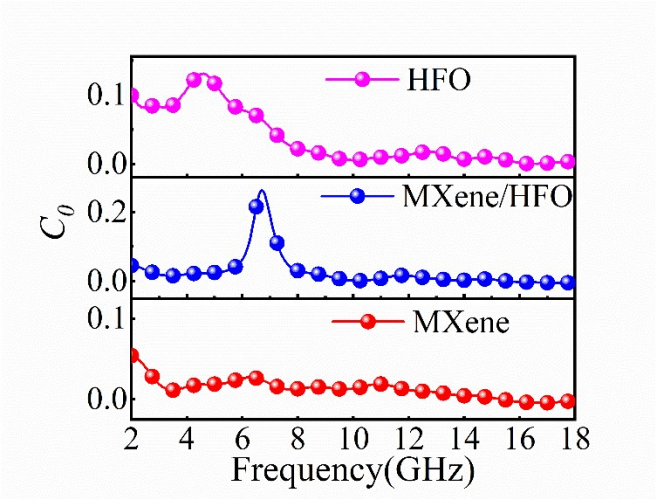

Fig.S4 The C_0 curves of HFO, MXene/HFO hybrids and MXene.

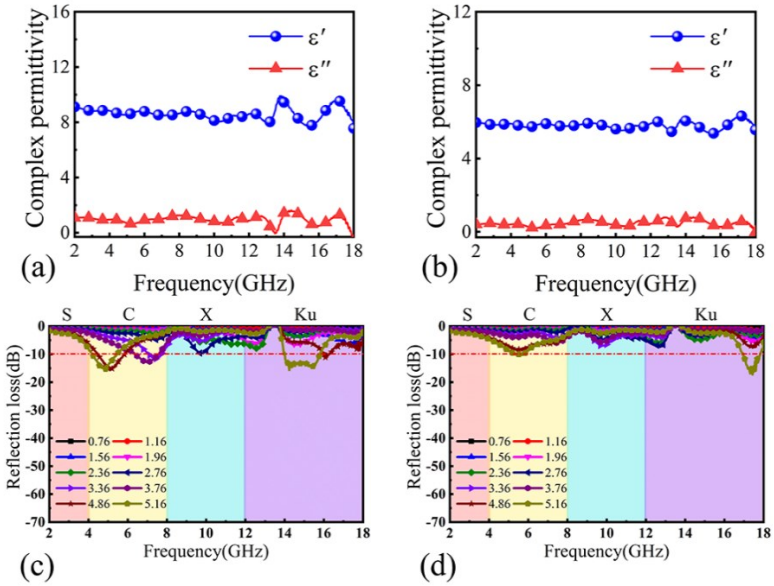

Fig.S5 The ε' and ε'' curves and RL curves for MXene/HFO hybrids with 50 wt% ((a),

(c)) and 75 wt% ((b), (d)) content of HFO.

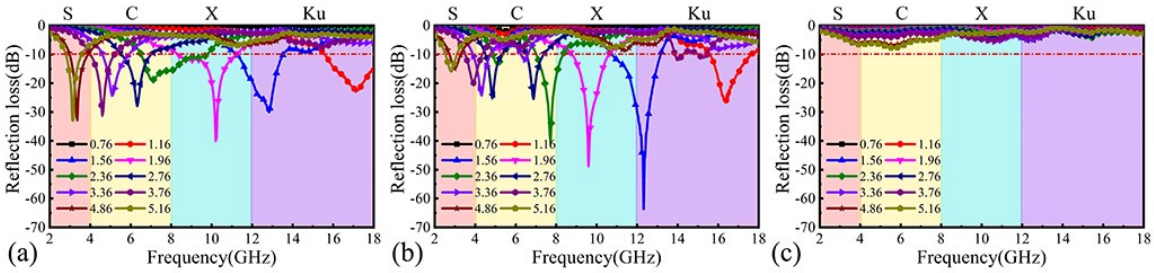

Fig.S6 The RL curves with various thicknesses for MXene (a), MXene/HFO hybrids (b) and HFO(c).