Supporting Information for

Sandwich-like Fe&TiO2@C Nanocomposites Derived from

MXene/Fe-MOFs Hybrids for Electromagnetic Absorption

Baiwen Deng¹, Zhen Xiang¹, Juan Xiong¹, Zhicheng Liu¹, Lunzhou Yu², Wei Lu^{1, *}

¹Shanghai Key Lab. of D&A for Metal-Functional Materials, School of Materials Science & Engineering, Tongji University, Shanghai 201804, People's Republic of China

²School of Materials Science & Engineering, University of Shanghai for Science and Technology, Shanghai 200092, People's Republic of China

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

Supplementary Figures



Fig. S1 DSC curve of Ti₃C₂T_x-FeMOF hybrids



Fig. S2 XRD pattern of Ti₃AlC₂



Fig. S3 Morphologies of $Ti_3C_2T_x$ MXene and $Ti_3C_2T_x$ -FeMOF hybrids



Fig. S4 EDS results of as-prepared $Ti_3C_2T_x$



Fig. S5 Element mapping result of S7



Fig. S6 a, b Magnetic hysteresis loops for S6, S7, and S8



Fig. S7 Frequency dependences of (a) real and (b) imaginary parts of complex permittivity, (c) real and (d) imaginary parts of complex permeability for Fe-MOF and $Ti_3C_2T_x$ after carbonized at 700 °C at the frequency range of 2-18 GHz



Fig. S8 *RL* results at different thickness for Fe-MOF (a) and $Ti_3C_2T_x$ (b) after carbonized at 700 °C