



## Supplementary Material

# Interfacing MXene Flakes on a Magnetic Fiber Network as a Stretchable, Flexible, Electromagnetic Shielding Fabric

Zhen Miao, Xiaohong Chen \*, Honglei Zhou, Ping Liu, Shaoli Fu, Jiajie Yang, Yuhang Gao, Yupeng Ren, and Dong Rong

School of Materials Science and Engineering, University of Shanghai for Science and Technology, Shanghai 200000, China; 193742704@st.usst.edu.cn (Z.M.); 193742699@st.usst.edu.cn (H.Z.); 193742700@st.usst.edu.cn (P.L.); 171380130@st.usst.edu.cn (S.F.); 192432667@st.usst.edu.cn (J.Y.); 193742737@st.usst.edu.cn (Y.G.); 192432629@st.usst.edu.cn (Y.R.); 193742742@st.usst.edu.cn (D.R.)

\* Correspondence: 193742705@st.usst.edu.cn

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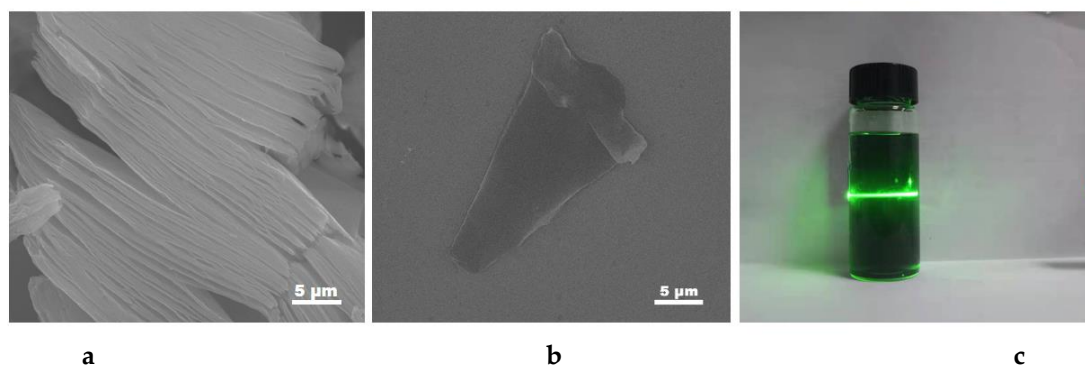
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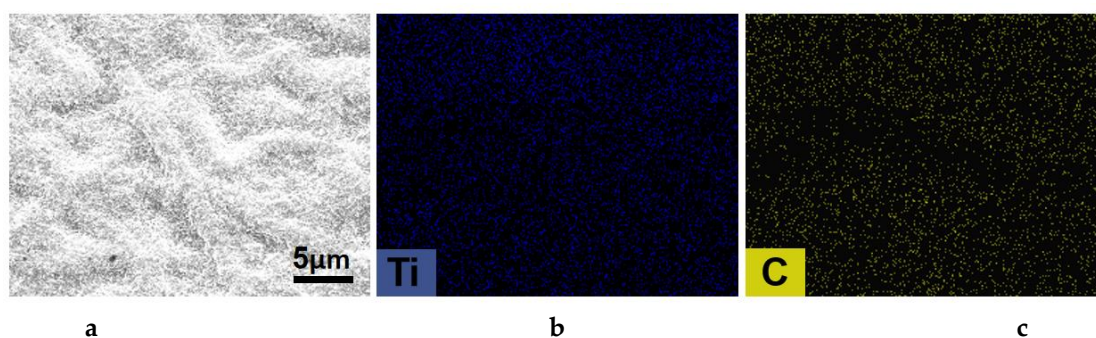
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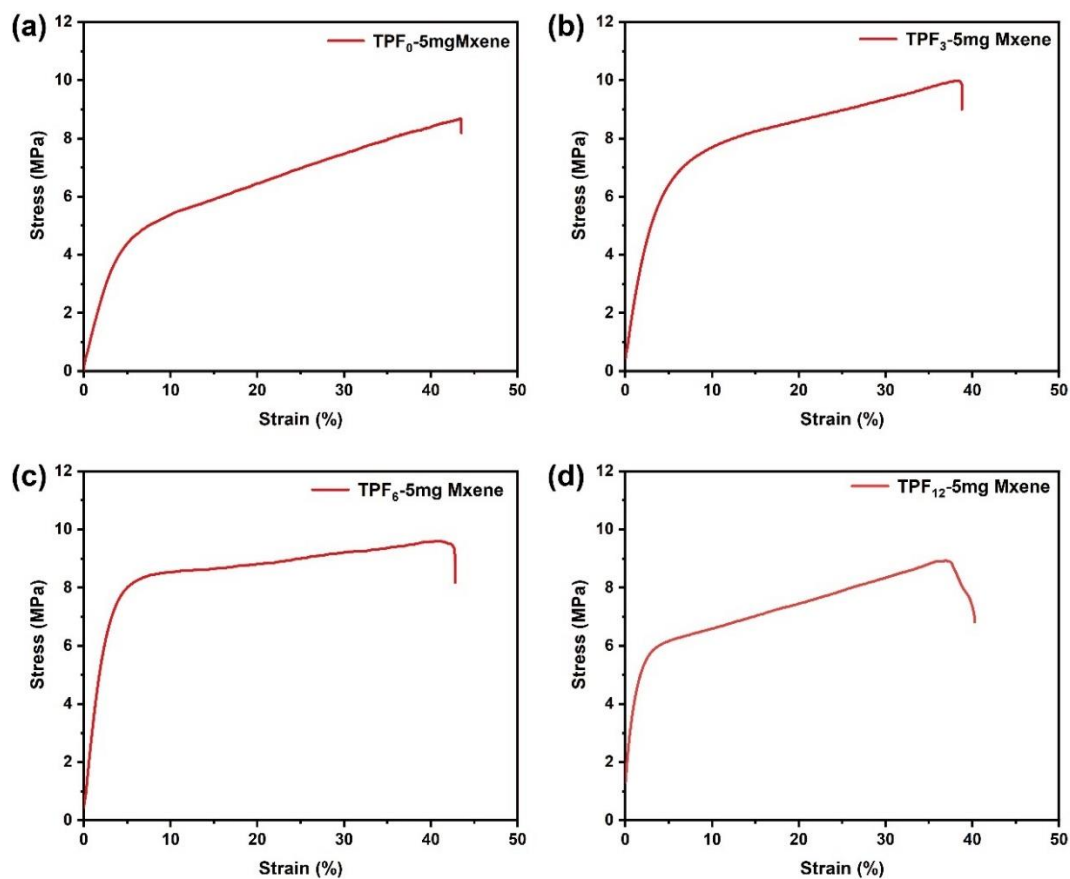
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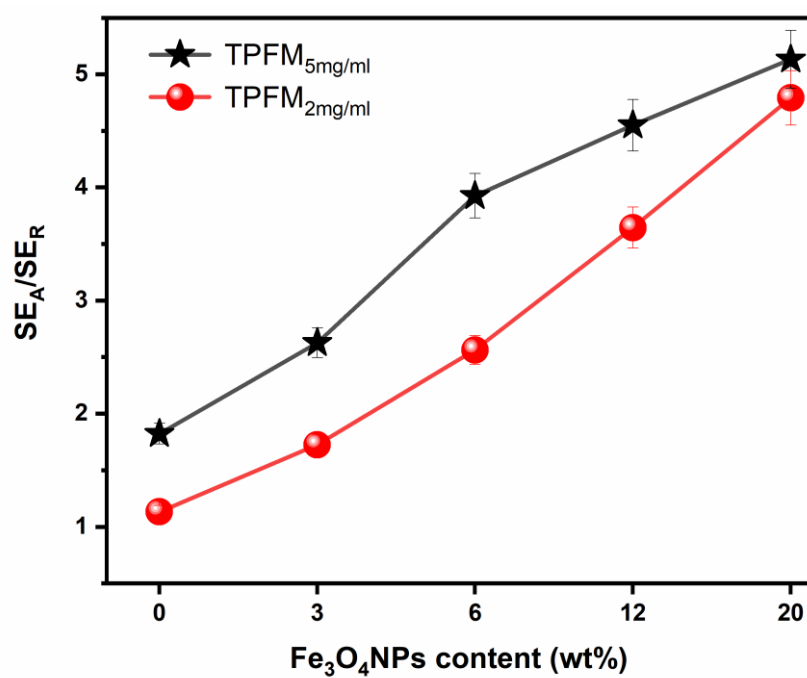
**Figure S1.** (a,b) SEM image of the Multi layer Mxene and MXene after exfoliation; (c) The Tyndall effect of few layer mxene solution.



**Figure S2.** (a-c) SEM image and element mapping images of TPFM, respectively.



**Figure S3.** (a–d) Stress-strain curves of the TPF-5 mg MXene with different  $\text{Fe}_3\text{O}_4\text{NPs}$  content, 0 wt%, 3 wt%, 6 wt% and 12wt% respectively.



**Figure S4.** The ratio of average  $SE_A$  and  $SE_R$  of TPFM films as a function of  $Fe_3O_4$ NPs/MXene loading.