

**High-performance, oxidation resistance and flexible Zn@MXene/cellulose nanofibers
electromagnetic shielding film**

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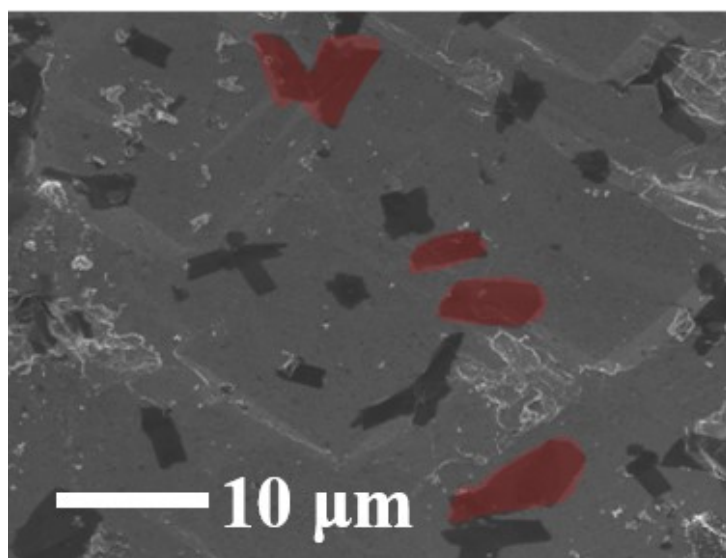


Fig. S1. Scanning electron microscopy (SEM) image of Ti₃C₂T_x

MXene

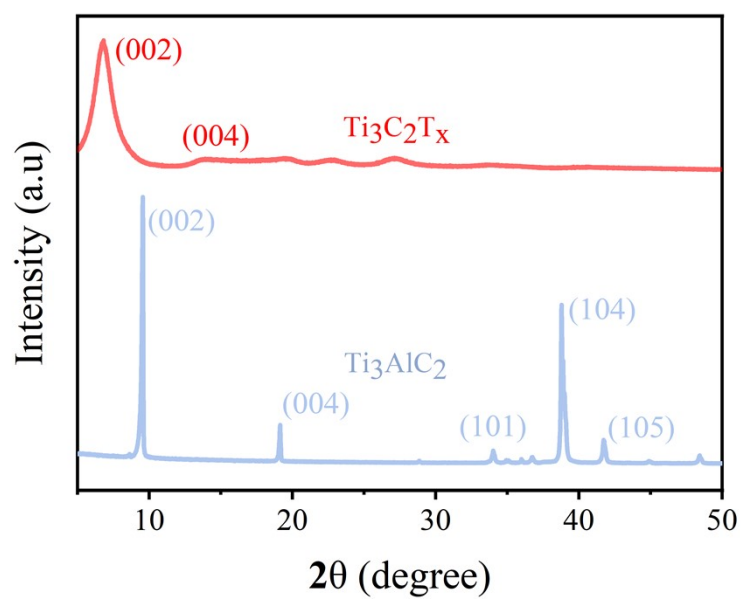


Fig. S2. XRD spectrogram for Ti₃AlC₂ MAX and Ti₃C₂T_x

MXene

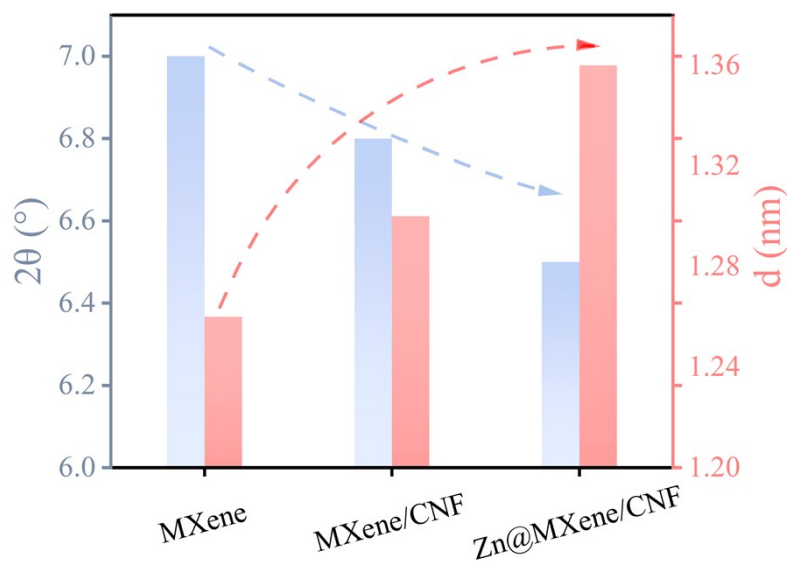


Fig. S3. Enhancement of MXene nanosheets lamellar spacing

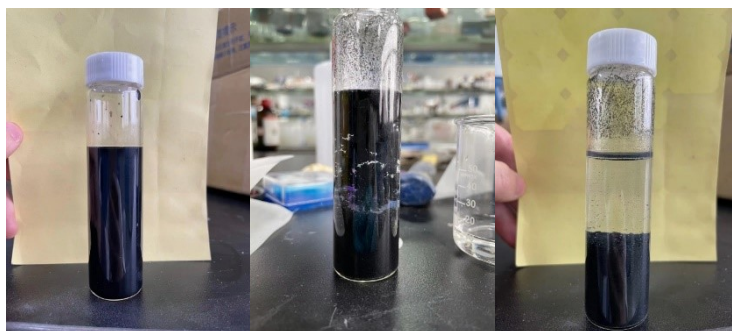


Fig. S4 Schematic diagram of self-assembly process

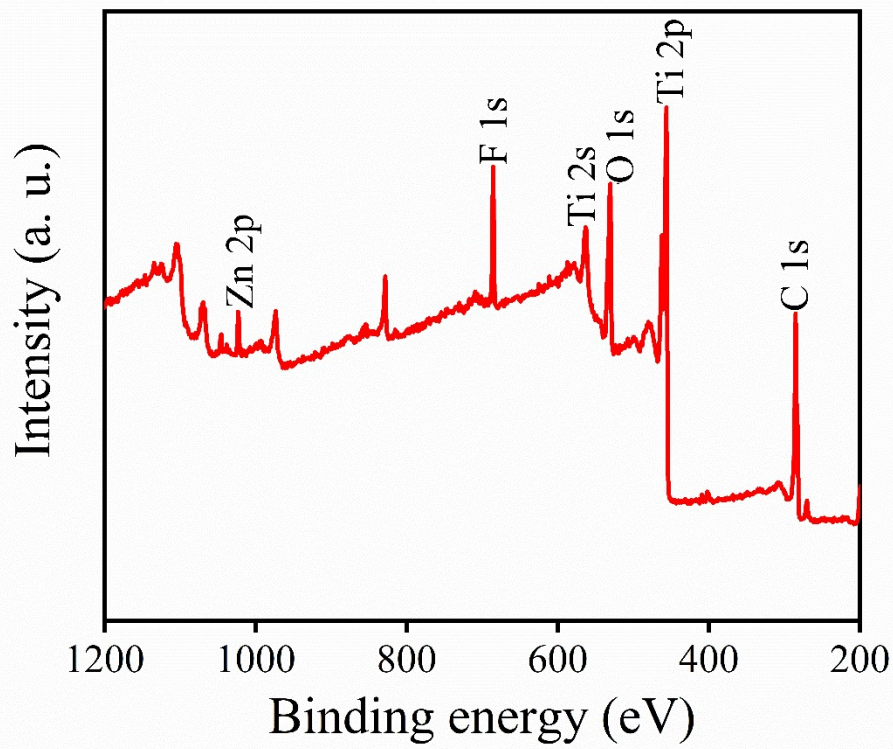


Fig. S5 XPS of Zn@MXene/CNF composite film

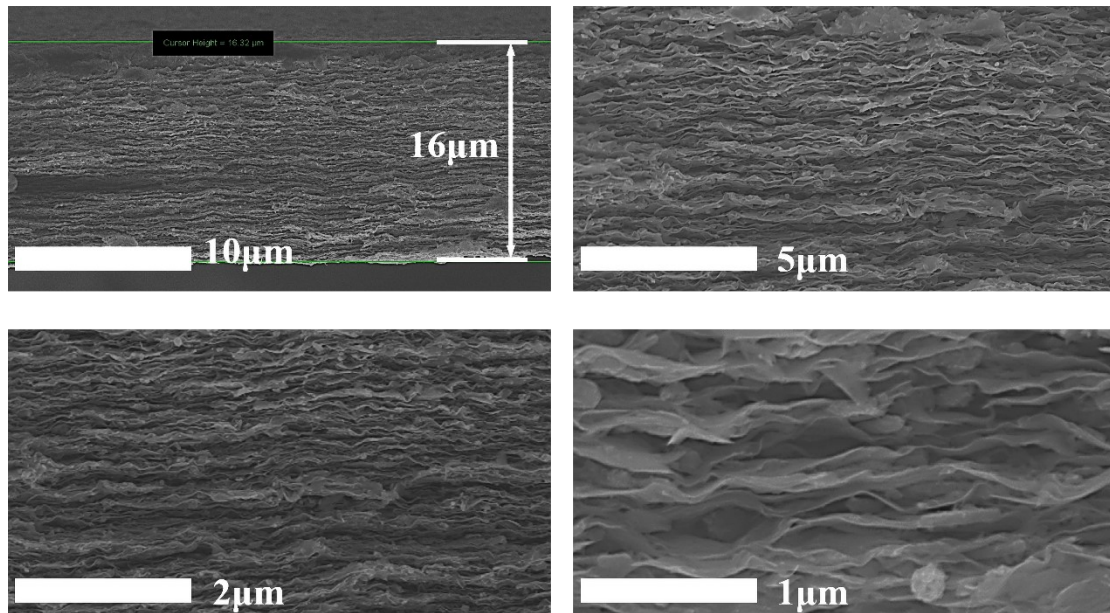


Fig. S6 SEM picture for cross section of film before hot-pressing

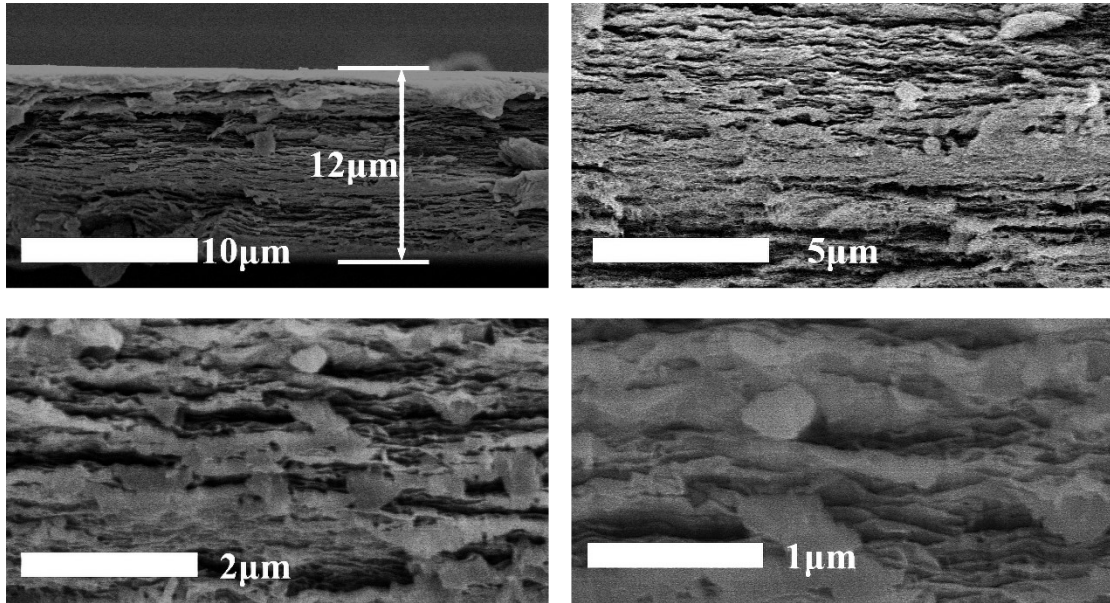


Fig. S7 SEM picture for cross section of film after hot-pressing

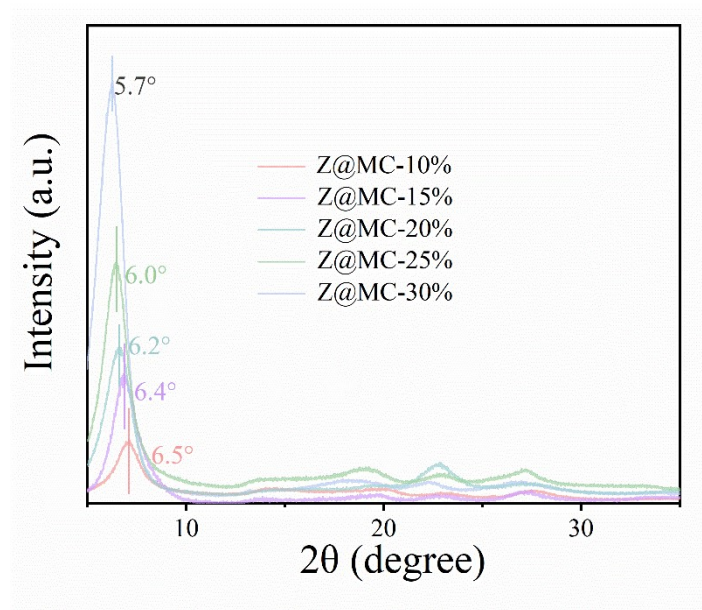


Fig. S8 X-ray diffraction (XRD) patterns of the Zn@Ti₃C₂T_x MXene/CNF samples

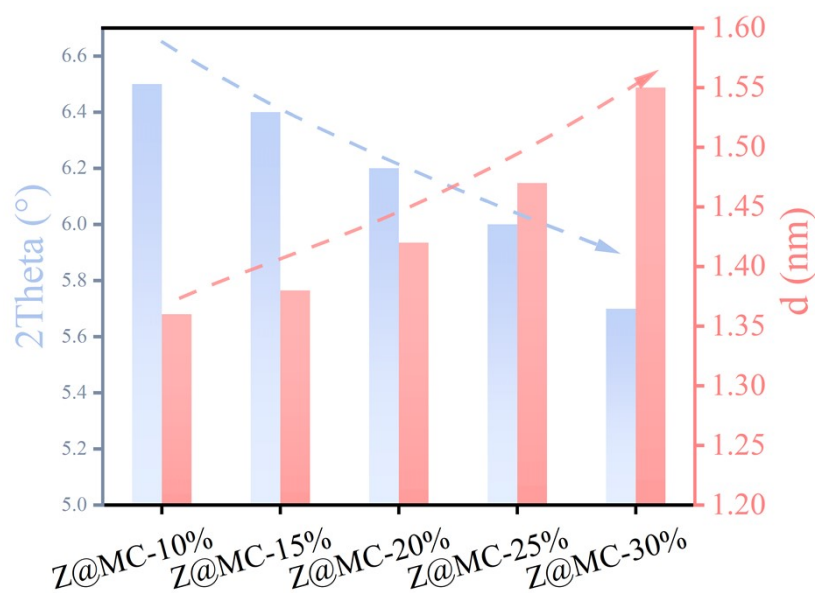


Fig. S9 Enhancement of MXene nanosheets lamellar spacing

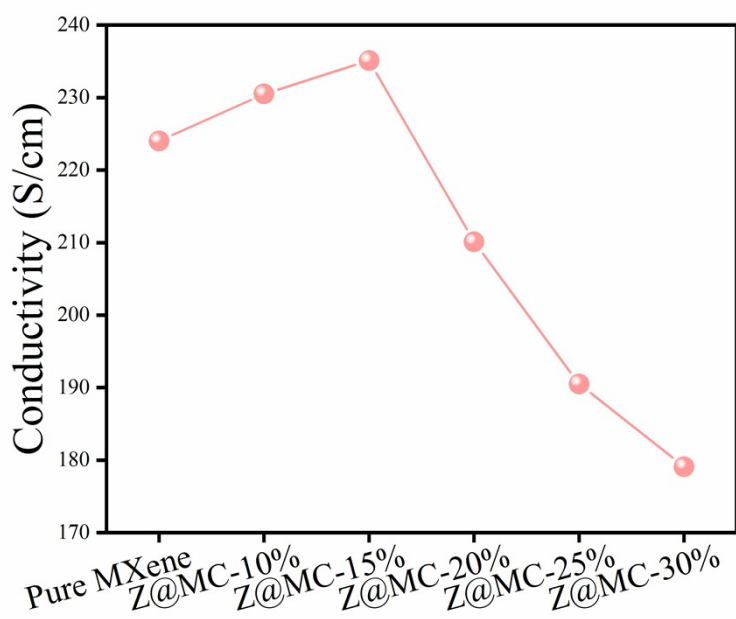


Fig. S10 Electrical conductivity of film samples