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

Supplementary Information

Absorption-dominated electromagnetic interference shielding composite foam based on porous and bi-conductive network structure

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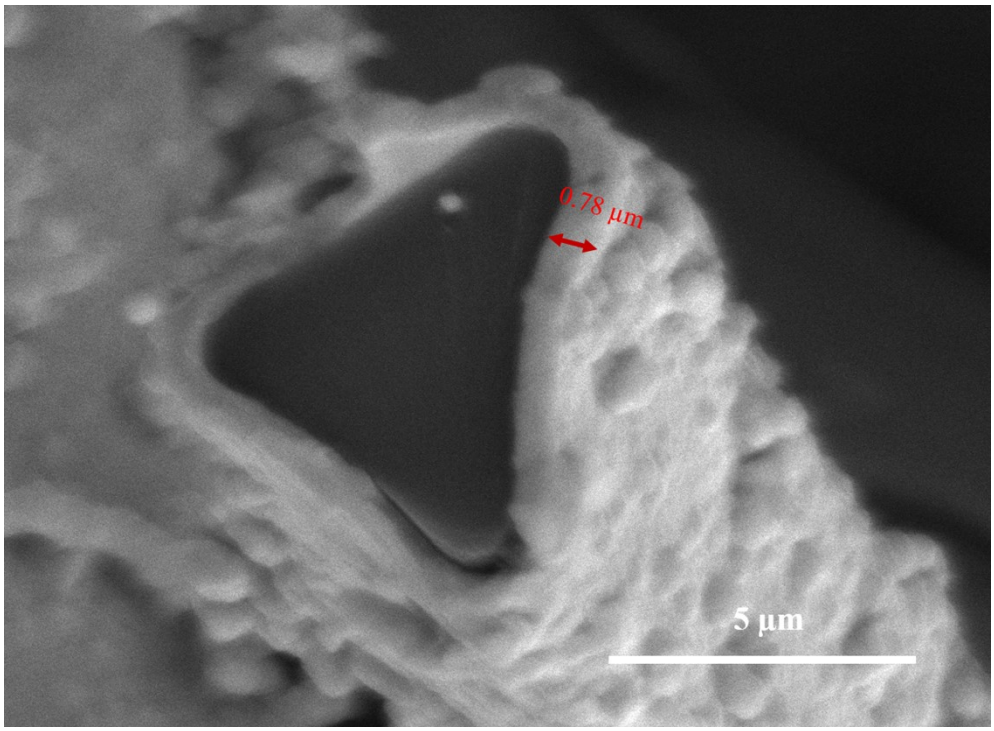

Fig. S1 SEM image of Ni@MF sponges.

Fig. S2 Digital photos of Ni (left) and Ni@MF (right) on the Precision Balance.

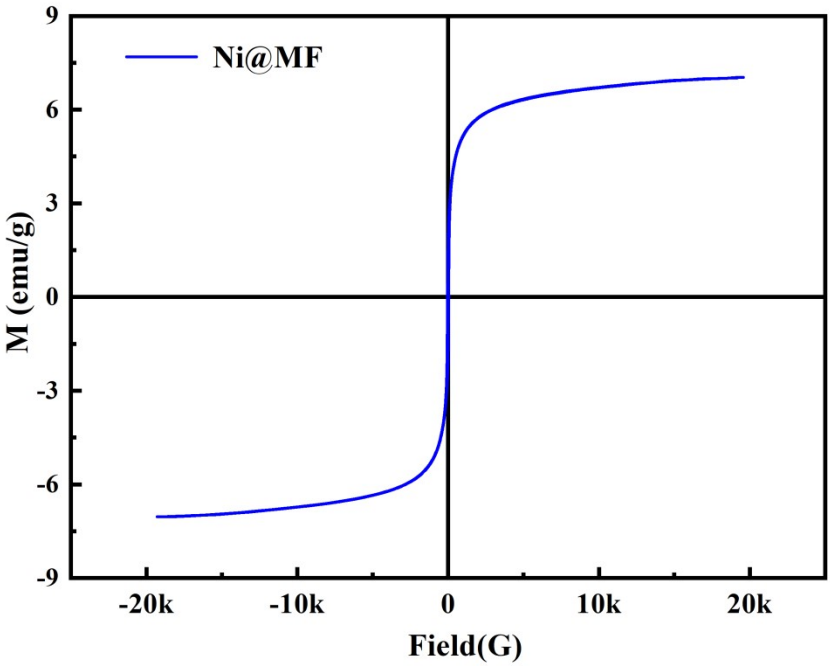

Fig. S1 VSM spectrum of Ni@MF sponges.

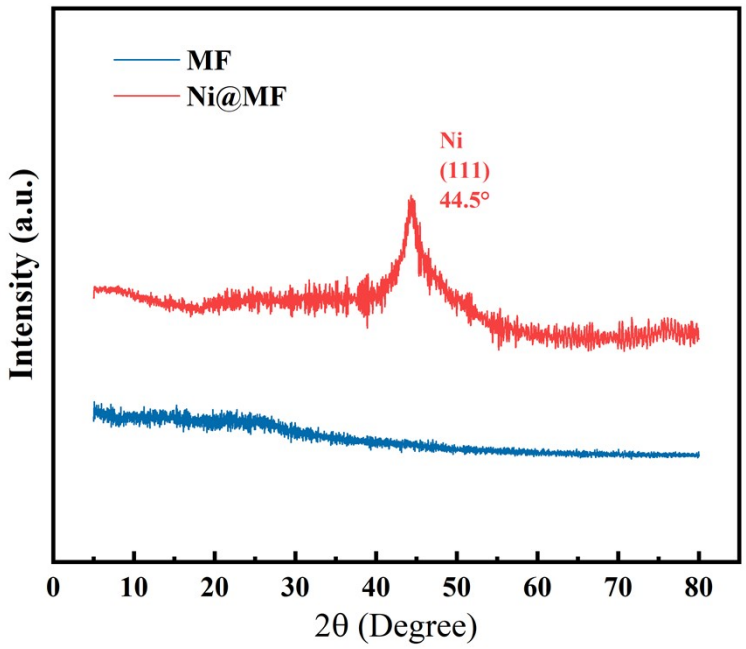

Fig. S4 XRD patterns of MF and Ni@MF sponges.

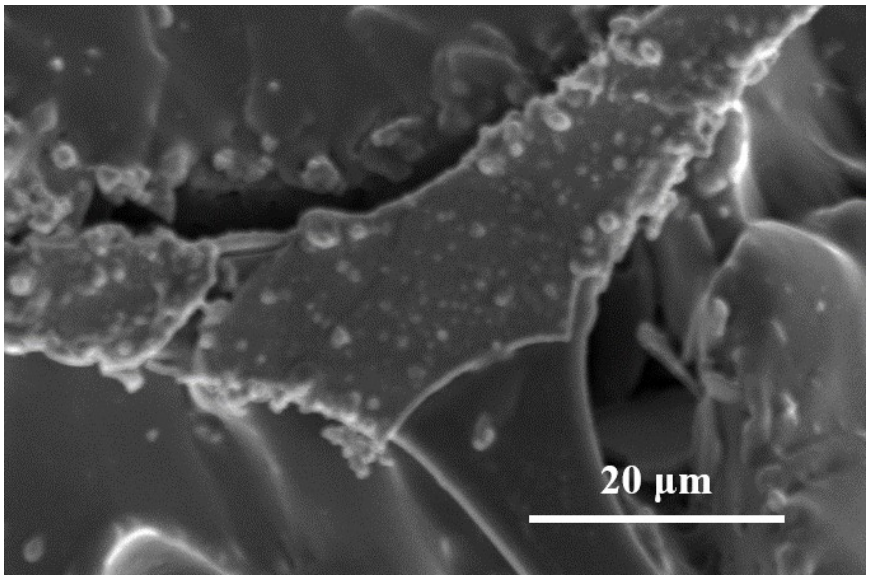

Fig. S5 SEM image of Ni@MF in Ni@MF/CNT_3/TSM/PDMS composite foam.

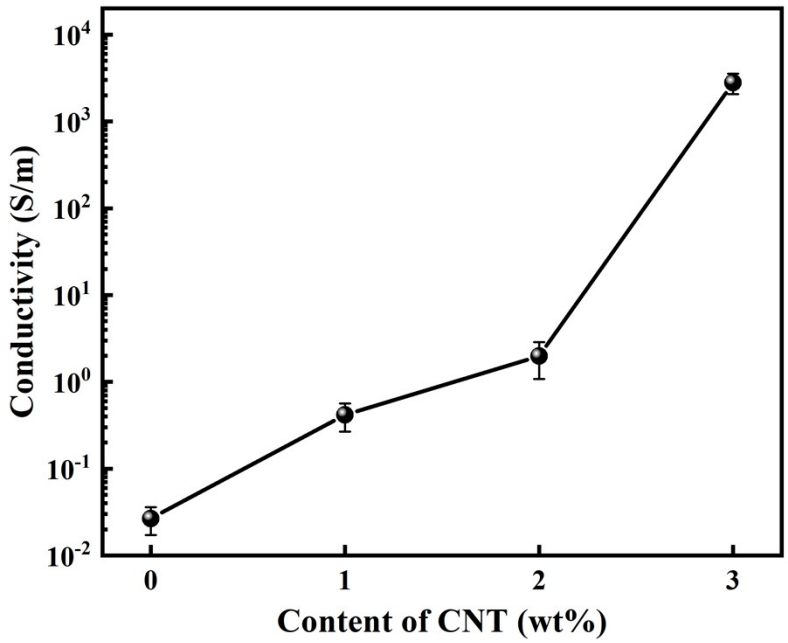

Fig. S6 Electric conductivity of Ni@MF/CNT/TSM/PDMS composite foams with different content of CNT.

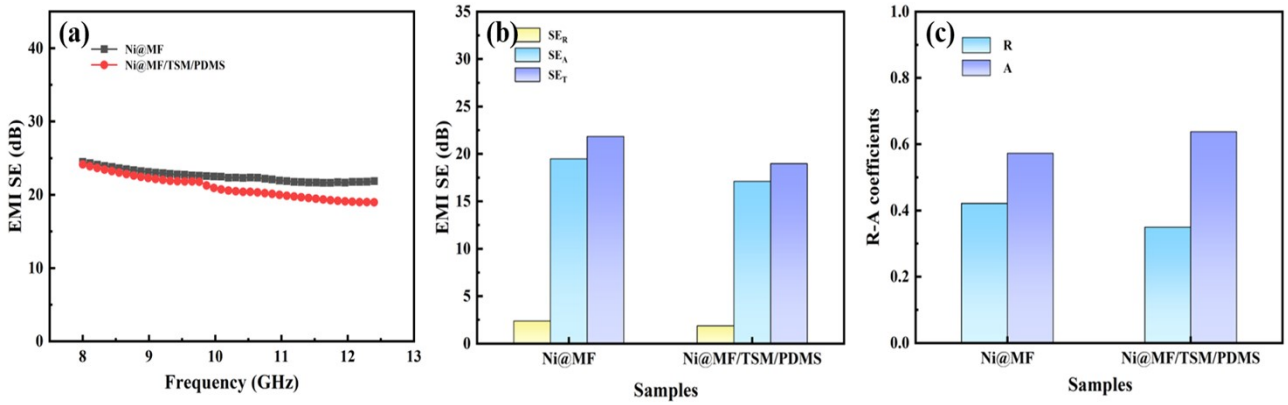

Fig. S7 (a) EMI SE, (b) SE_A, SE_R, SE_T, (c) R-A coefficients of Ni@MF and Ni@MF/TSM/PDMS foams.

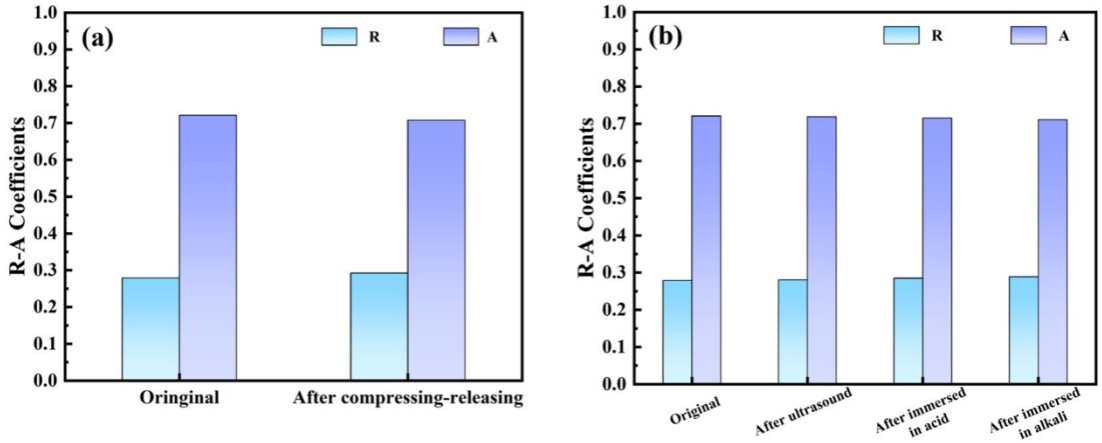

Fig. S8 R-A coefficients of Ni@MF/CNT_3/TSM/PDMS composite foams at the frequency of 12.4 GHz after (a) compressing-releasing for 100 cycles, (b) ultrasound for 5 hours, immersed in acidic and alkali solution for 72 hours.