Electronic Supplementary Material (ESI) for Nanoscale Advances.

Electronic Supplementary Information

MoS_2 nanoparticles/Activated carbon composite as a dual-band microwave absorbing material

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Supporting information

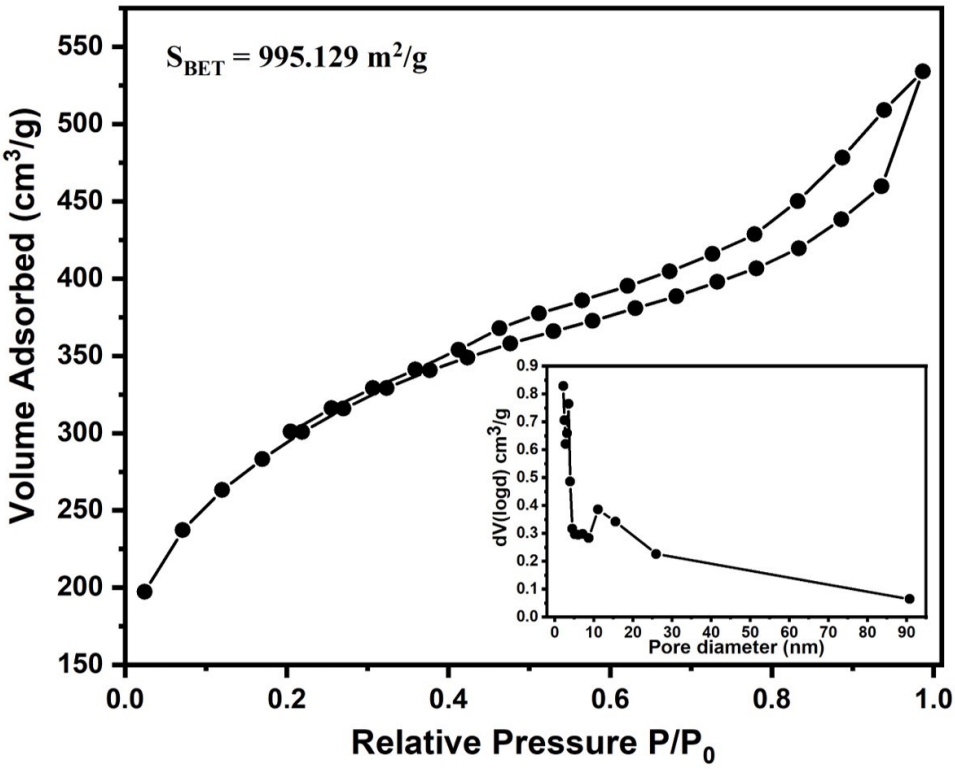

Fig. S1. Nitrogen adsorption-desorption isotherm and pore size distribution (inset Figure) of AC.

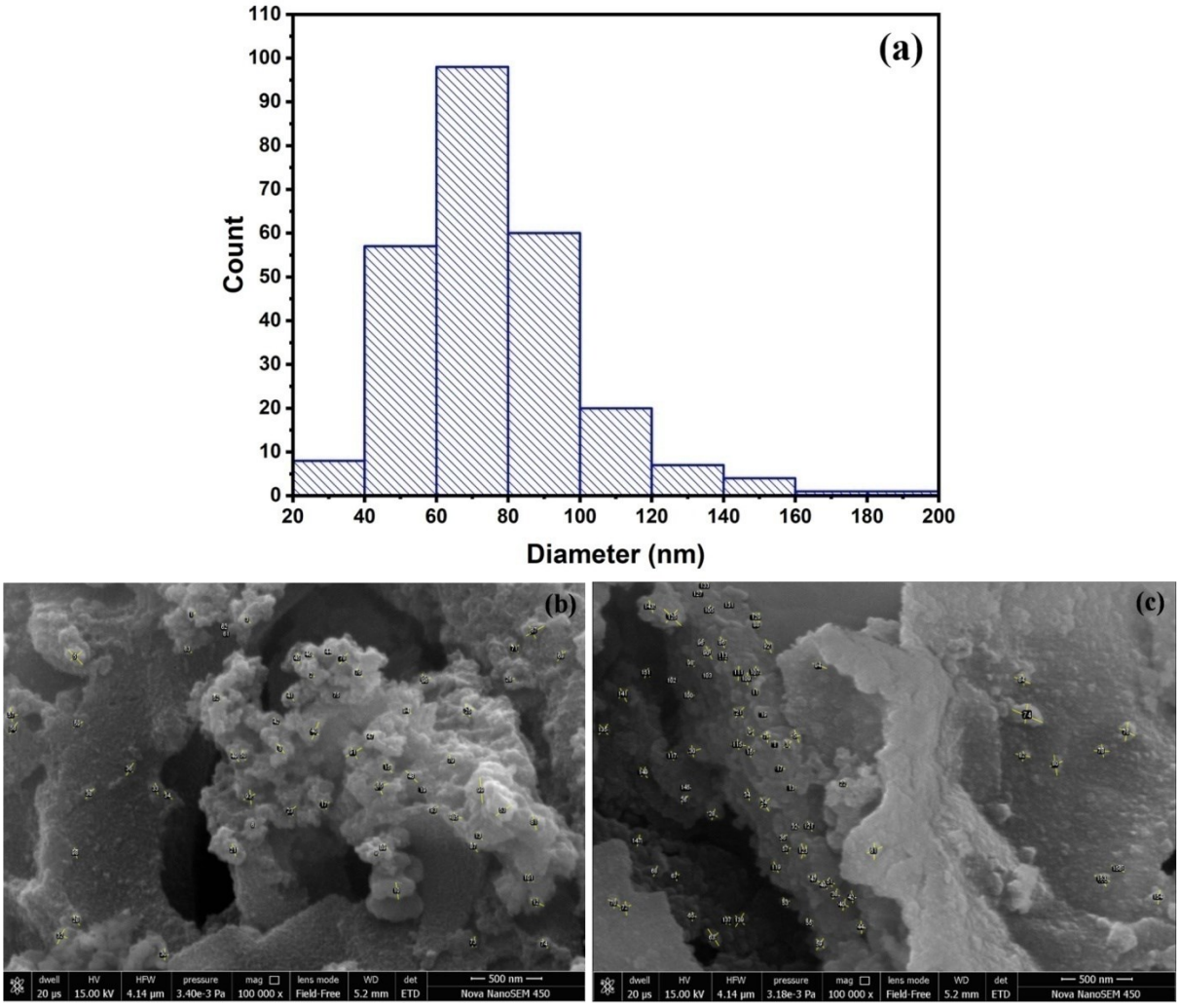

Fig. S2. (a) MoS_2 particle size distribution in MAC using FESEM image (b) and (c).

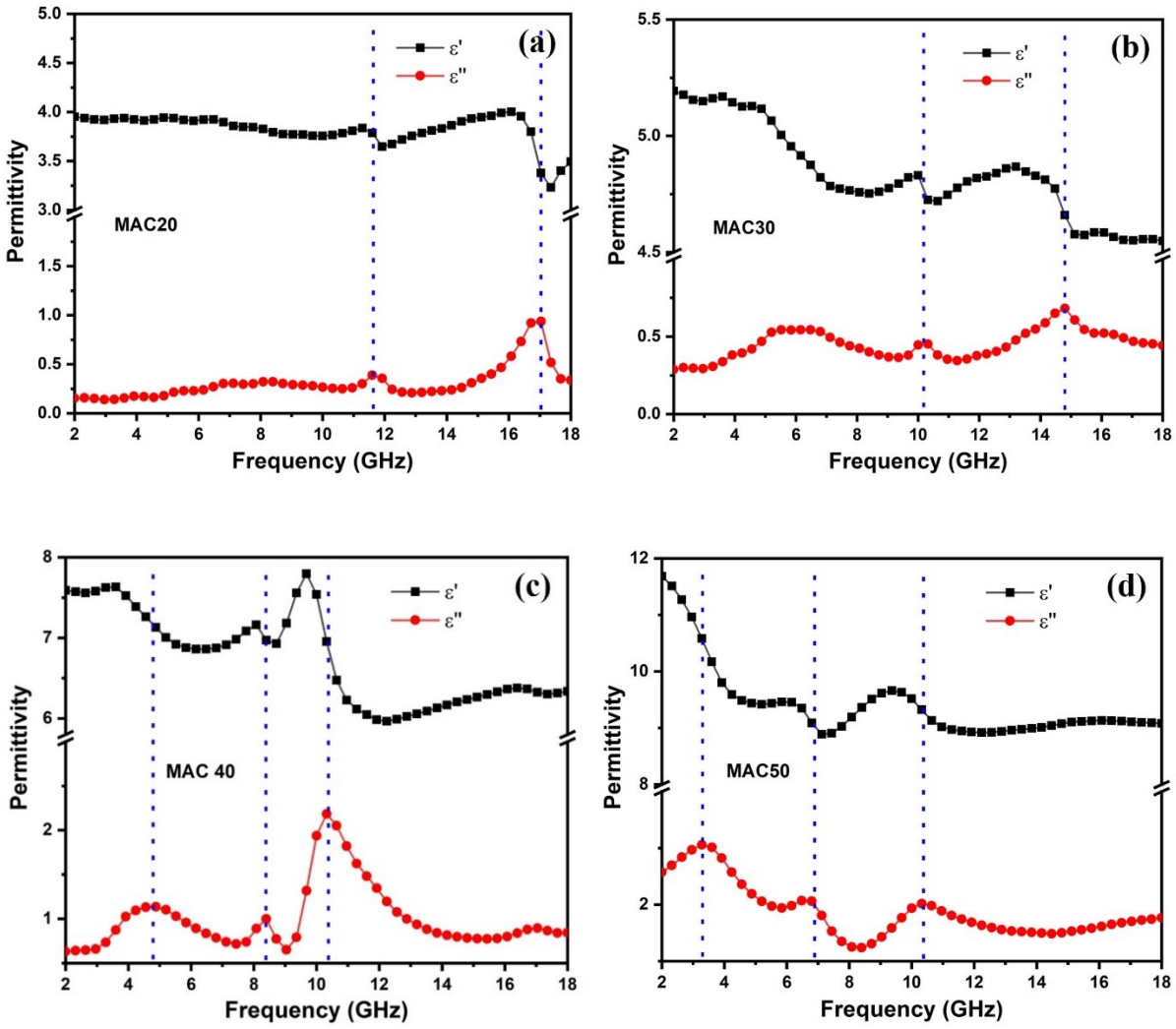

Fig. S3. Complex permittivity of (a) MAC20, (b) MAC30, (c) MAC40 and (d) MAC50.

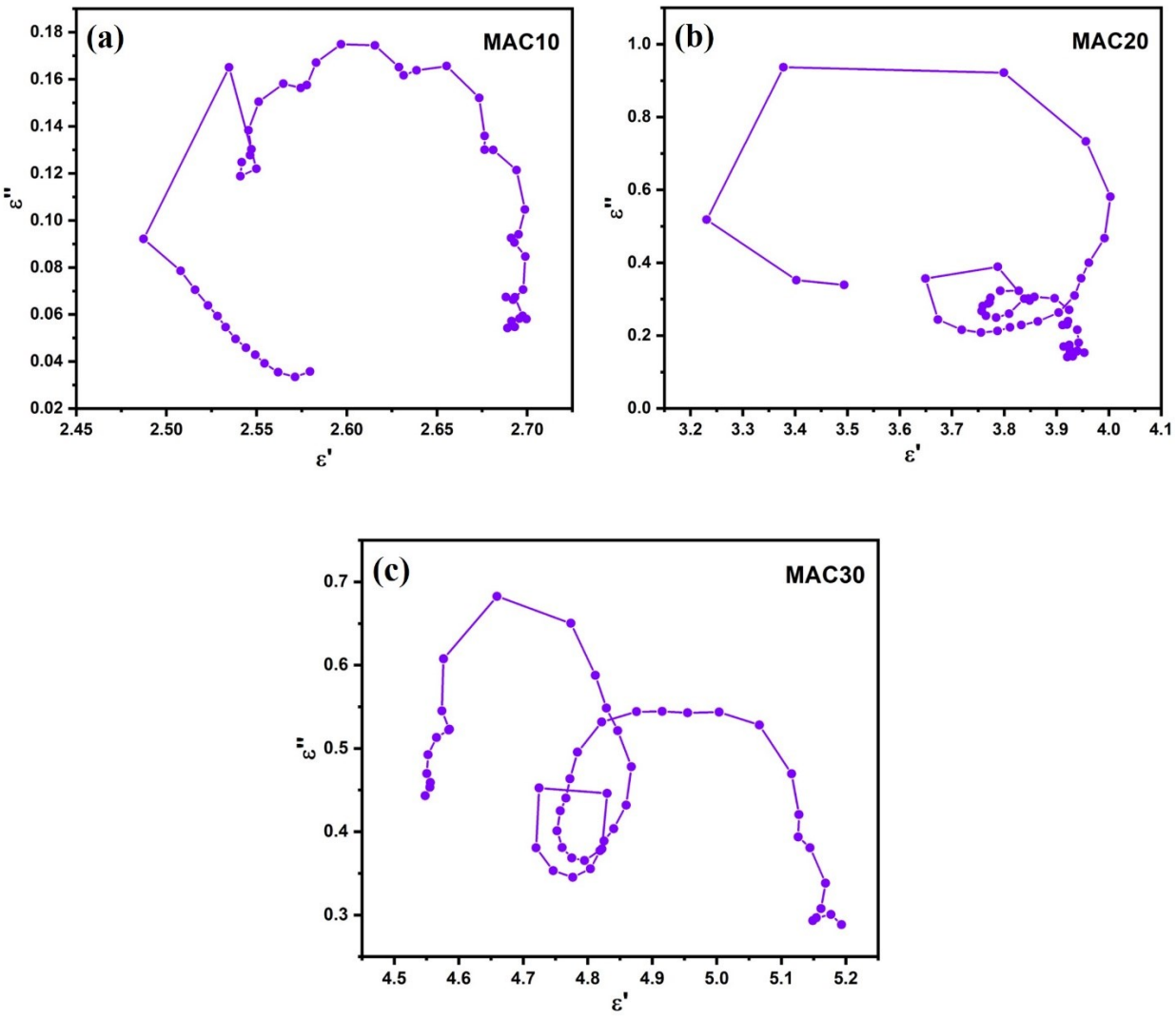

Fig. S4. Cole-Cole plot of (a) MAC10, (b) MAC20 and (c) MAC30.

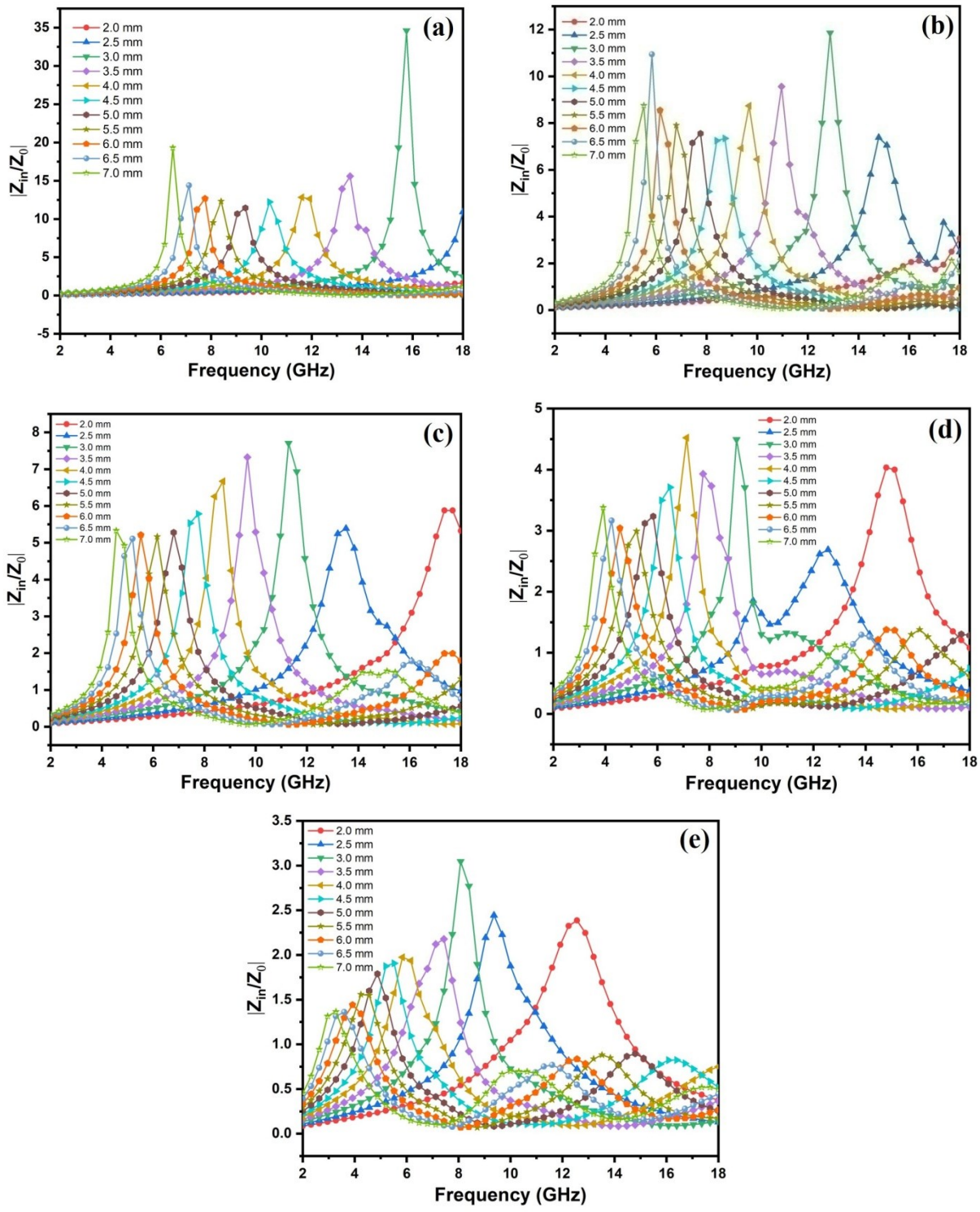

Fig. S5. Relation between $|Z_{in}/Z_o|$ and frequency for (a) MAC10, (b) MAC20, (c) MAC30, (d) MAC40 and (e) MAC50 at thicknesses ranging from 2 mm to 7 mm.

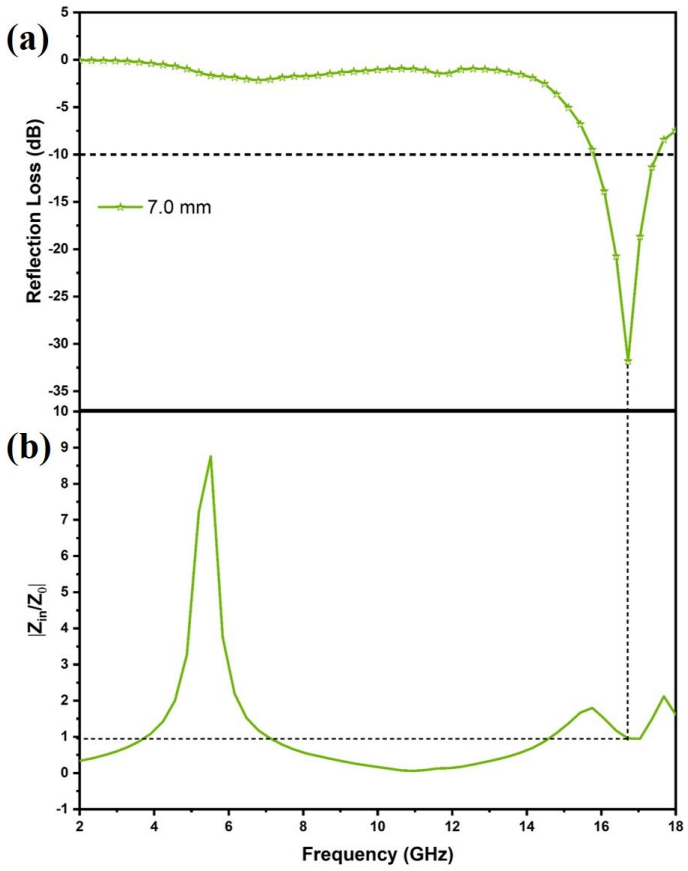

Fig. S6. (a) The RL-Frequency curves at 7 mm thickness and (b) Relationship between $|Z_{in}/Z_o|$ and peak frequency for MAC20.

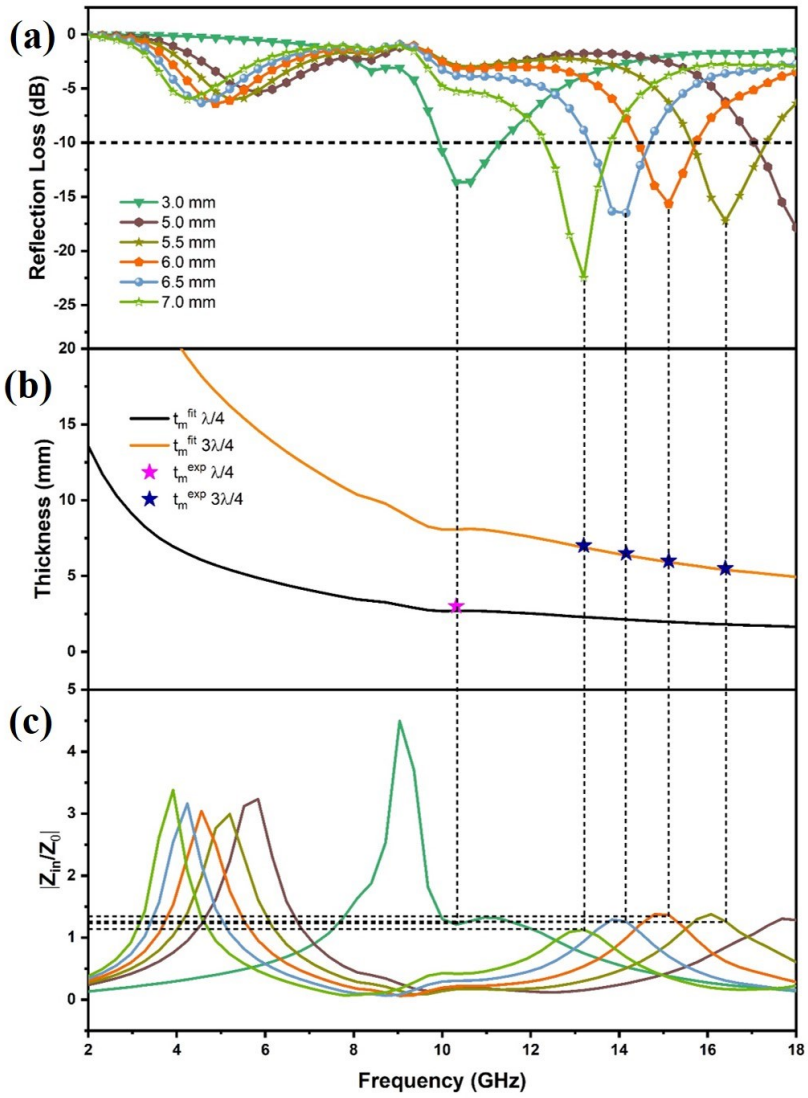

Fig. S7. (a) The RL-Frequency curves of MAC40 with absorber thickness from 3 mm to 7 mm; (b) Relationship between t_m^{fit}, t_m^{exp} and peak frequency of MAC40 under nλ/4 model and (c) The relationship between $|Z_{in}/Z_o|$ and frequency for MAC40.