Electronic Supplementary Information

Excellent microwave absorbing performance of biomass derived activated carbon decorated with in-situ grown CoFe$_2$O$_4$ nanoparticles

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Supporting information
Fig. S1. TEM images of (a) FAC00, (b) FAC10 and (c) FAC30; (d) Particle size distribution of all the samples using all TEM images.
Fig. S2. Magnetic hysteresis loop and enlarged hysteresis loop (inset Figure) of all the samples.
Fig. S3. Complex permeability of (a) FAC00, (b) FAC10, (c) FAC20 and (d) FAC30.
Fig. S4. Relation between $|Z_{in}/Z_o|$ and frequency for (a) FAC00, (b) FAC10, (c) FAC20 and (d) FAC30 at thicknesses ranging from 1.5 mm to 5 mm.
Fig. S5. (a) The RL-frequency curves of FAC30 with absorber thickness from 1.5 mm to 5 mm; (b) Relationship between $t^\text{fit}$, $t^\text{exp}$, and $n\lambda/4$ and peak frequency of FAC30 under $n\lambda/4$ model and (c) The relationship between $|Z_{in}/Z_0|$ and frequency for FAC30.