Supplementary materials for "Facile preparation, formation mechanism and microwave absorption properties of porous carbonyl iron flakes"

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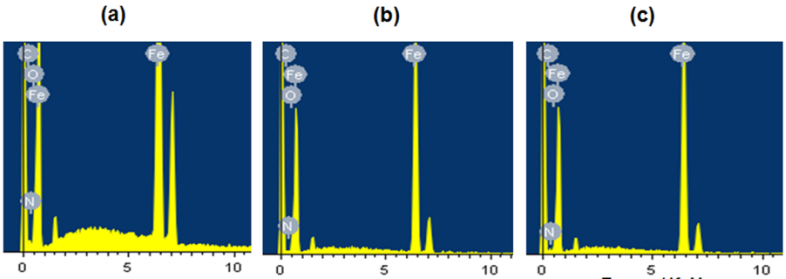

Elem	Wt%	At%
C	2.37	9.67
N	0.38	1.34
O	1.73	5.28
Fe	95.52	83.72

Elem	Wt%	At%
C	2.53	10.14
N	0.20	0.68
O	2.47	7.44
Fe	94.80	81.74

Elem	Wt%	At%
C	4.07	15.88
N	0.47	1.56
O	1.16	3.40
Fe	94.31	79.16

Fig. S1 EDX images and the listed elemental contents for (a) the raw CIFs, (b) the CIFs annealed at 350 ^{o}C and (c) the porous CIFs.

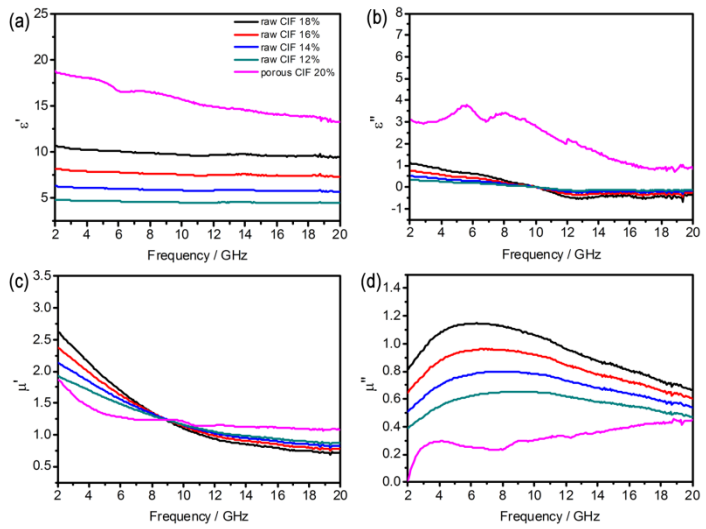

Fig. S2 Frequency dependence of (a) the real part (ε') and (b) imaginary part (ε'') of the complex permittivity, (c) the real part (μ') and (d) imaginary part (μ'') of the complex permeability for the raw CIFs with different volume percentages.

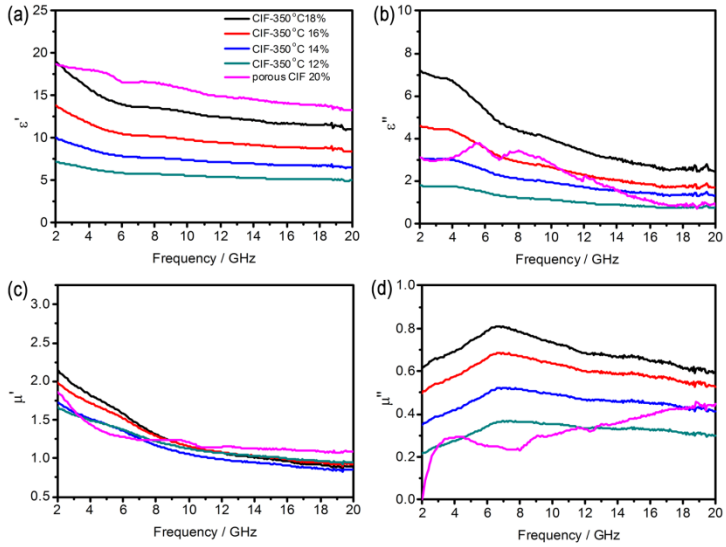

Fig. S3 Frequency dependence of (a) the real part (ε') and (b) imaginary part (ε'') of the complex permittivity, (c) the real part (μ') and (d) imaginary part (μ'') of the complex permeability for the CIFs annealed at 350 ^{o}C with different volume percentages.

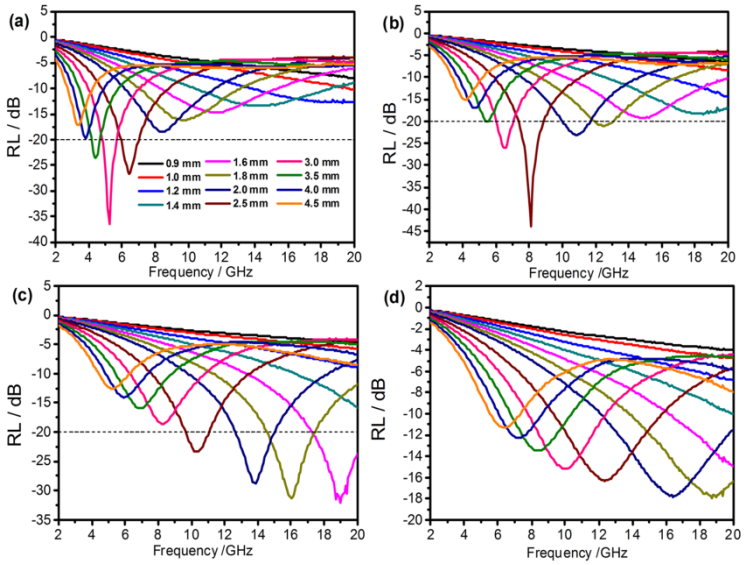

Fig. S4 Calculated *RL* vs. frequency for the composites containing (a) 18 vol%, (b) 16 vol%, (c) 14 vol% and (d) 12 vol% the raw CIFs in paraffin wax with different thicknesses.

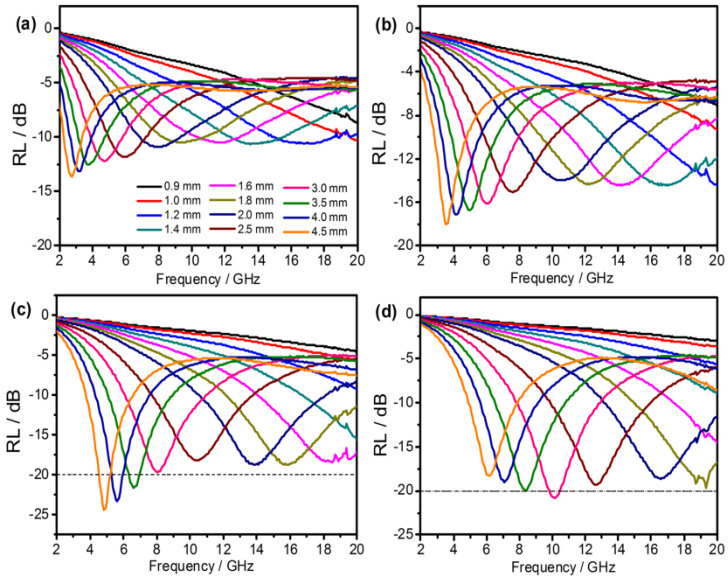

Fig. S5 Calculated *RL* vs. frequency for the composites containing (a) 18 vol%, (b) 16 vol%, (c) 14 vol% and (d) 12 vol% the CIFs annealed at 350 ^{o}C in paraffin wax with different thicknesses.