Electronic Supplementary Material (ESI) for RSC Advances.

Supporting information

Synthesis of graphene/α-Fe_2O_3 composites with excellent electromagnetic wave absorption properties

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Figure S1

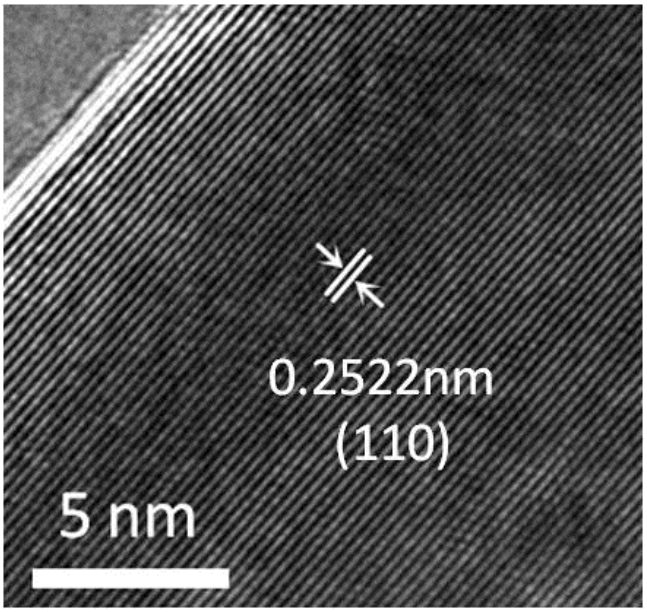

Fig. S1. A HRTEM image of Fe_2O_3 nanoparticle in the composite

Figure S2

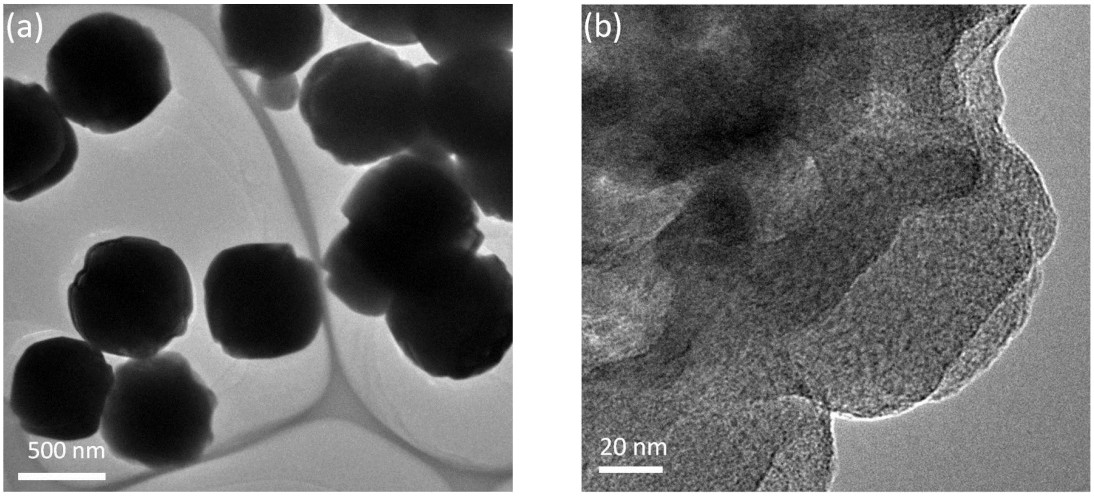

Figure S2 TEM images of Fe_2O_3 formed with absence of GO. (a) A low resolution image. (b) A high resolution image.

Figure S3

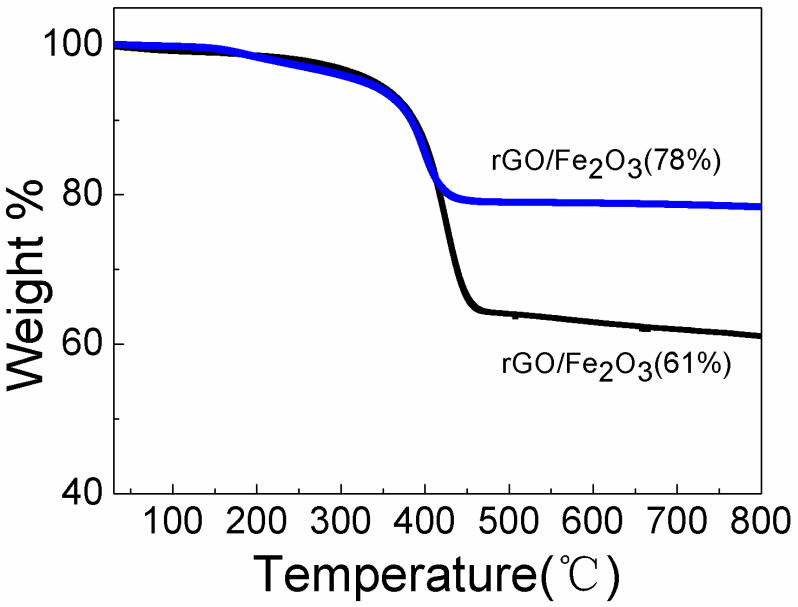

Fig. S3. TG curves of rGO/Fe_2O_3 composites with different amounts of Fe_2O_3 nanoparticles

Figure S4

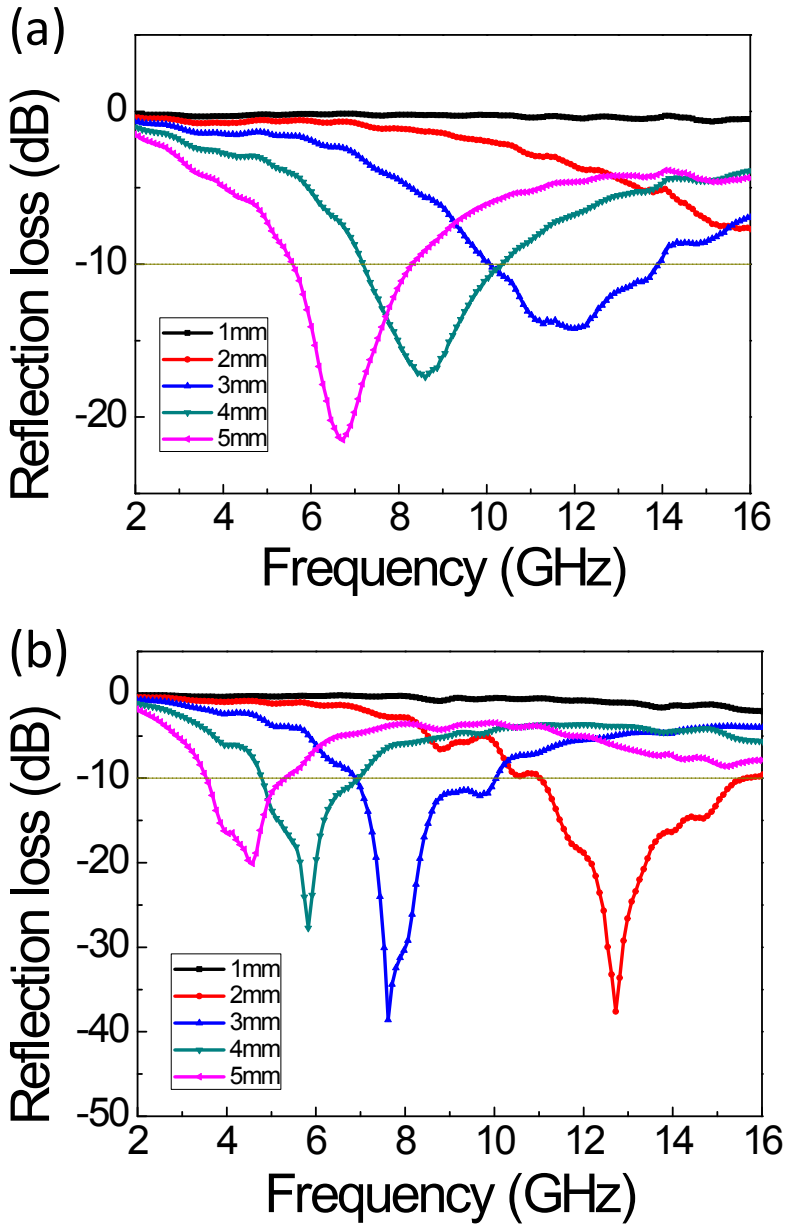

Fig. S4. The reflection loss of rGO/Fe_2O_3 composites with different amounts of Fe_2O_3 nanoparticles (a) 78%, (b) 61% measured with different thickness from 1 to 5mm.

Figure S5

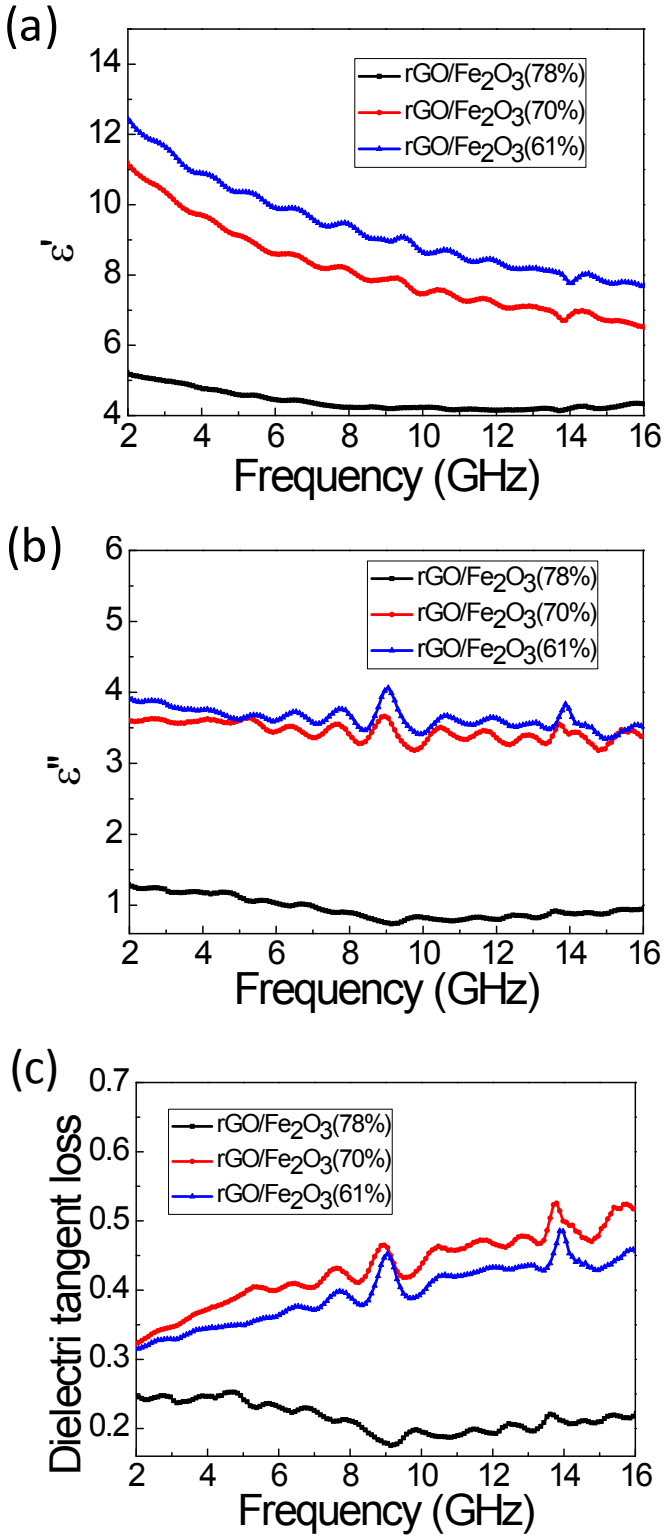

Fig. S5. Frequency dependence of real part (a) imaginary part (b) and dielectric loss tangent (c) for three kinds of rGO/Fe_2O_3 composites.