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Supplementary Information

Temperature Dependent Microwave Absorption of Ultrathin Graphene Composites

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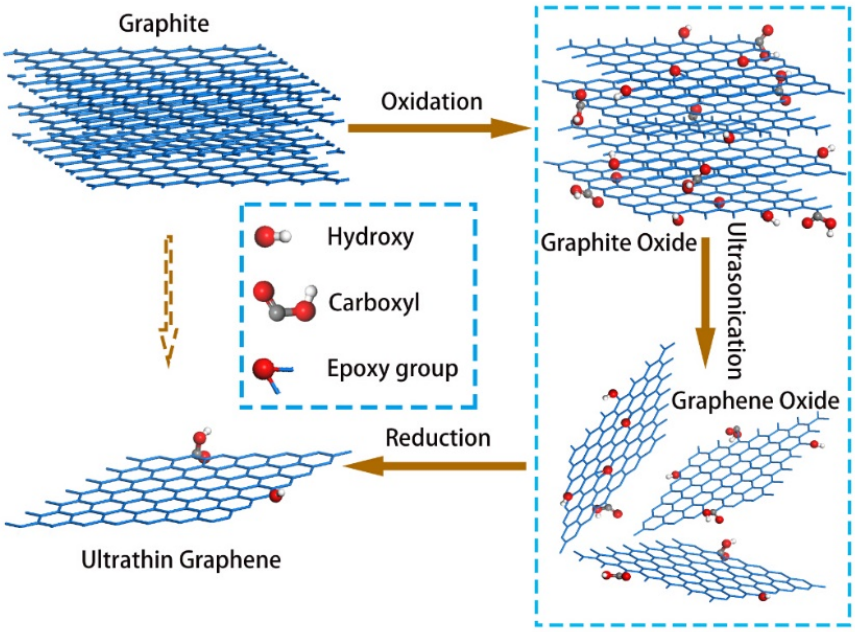

Fig. S1† Illustration for fabrication of graphene

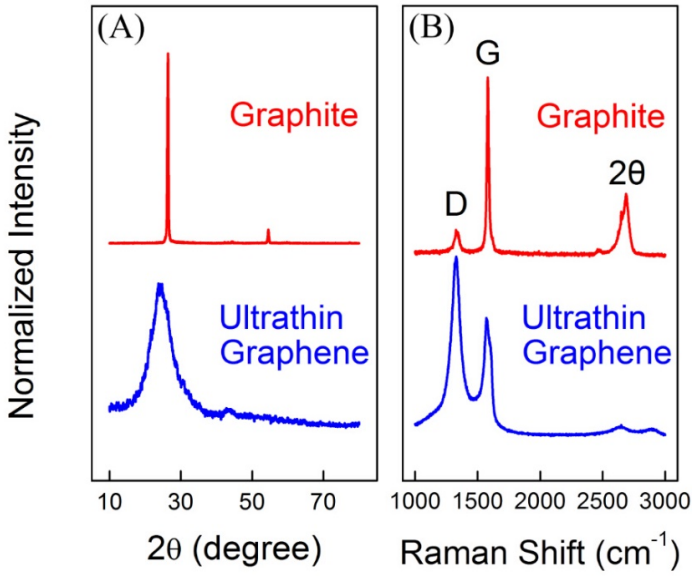

Fig. S2† XRD and Raman patterns of the graphite and ultrathin graphene, (A) XRD, (B) Raman spectrum.

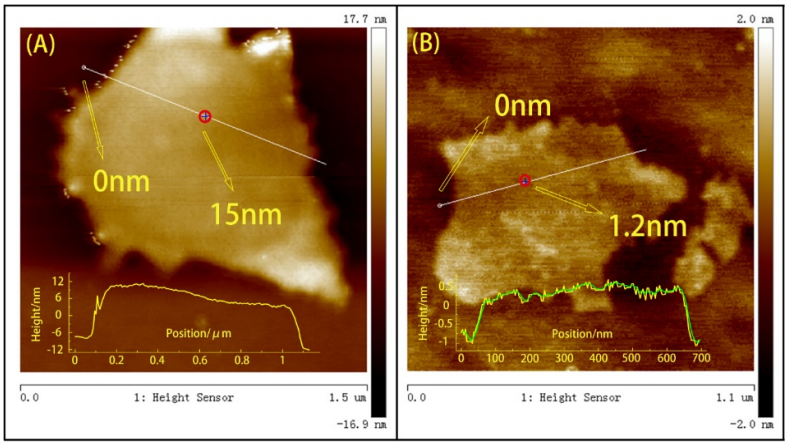

Fig. S3† AFM images of the (A) graphite and (B) graphene oxide.

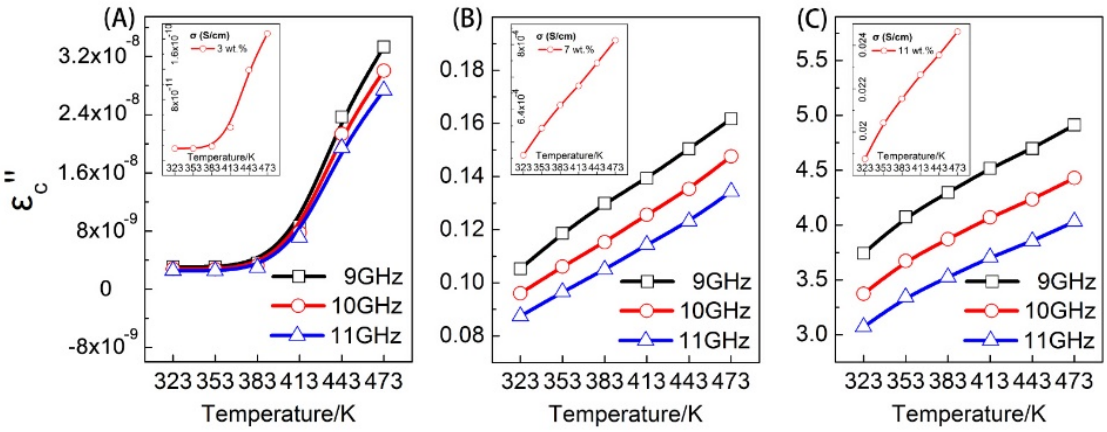

Fig. S4† The imaginary permittivity contributed by conductivity of the (A) 3 wt.%, (B) 7 wt.% and (C) 11 wt.% composites versus selected temperatures (323, 353, 383, 413 443 and 473K) at 9 GHz, 10 GHz and 11 GHz. The three insets are fitted conductivity of the (A) 3 wt.%, (B) 7 wt.% and (C) 11 wt.% composites versus selected temperatures (323, 353, 383, 413 443 and 473K).