

† Electronic Supplementary Information

A highly porous, light weight 3D sponge like graphene aerogel for electromagnetic interference shielding applications

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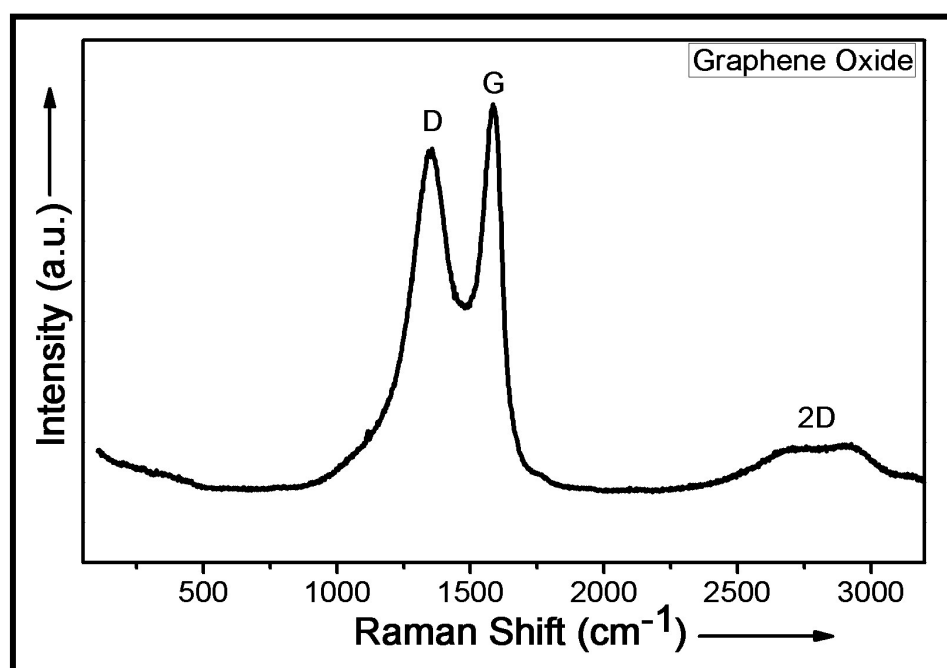


Fig. S1 Raman spectrum of GO.

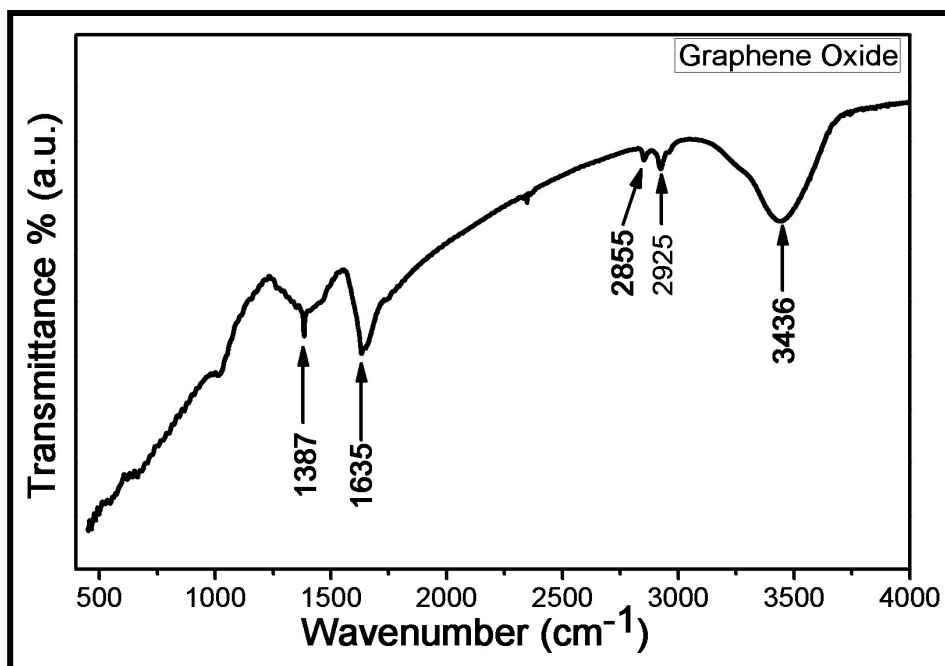


Fig. S2 FTIR spectrum of GO.

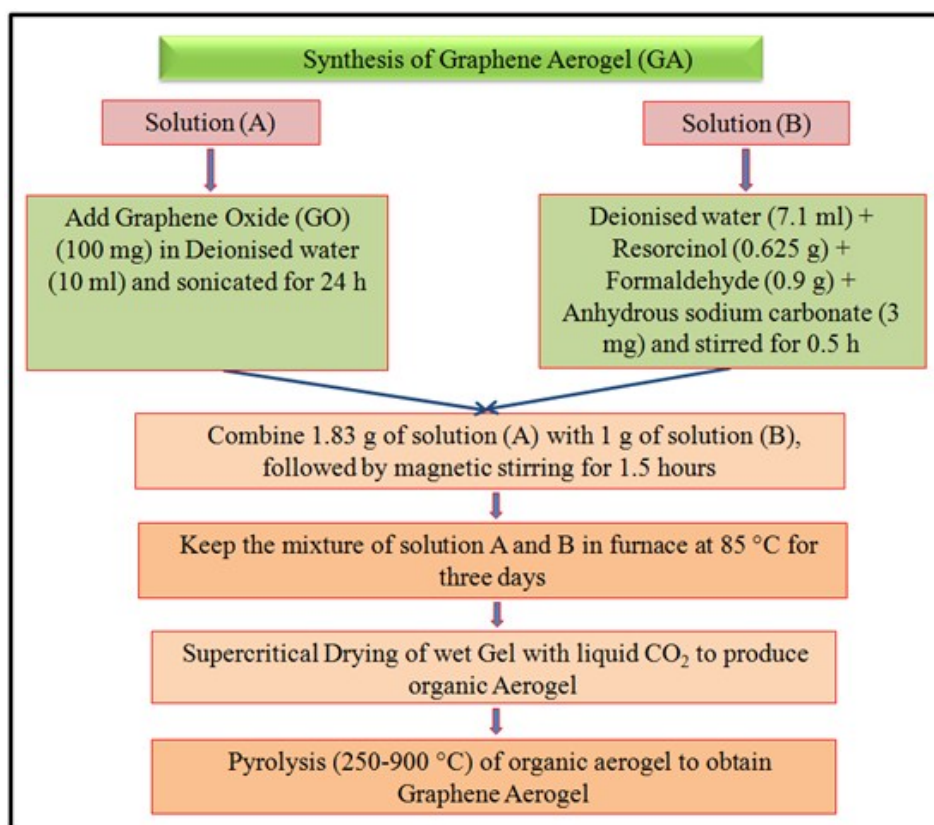


Fig. S3 Schematic representation of synthesis of Graphene Aerogel.



Fig. S4 Locally fabricated Supercritical Dryer.

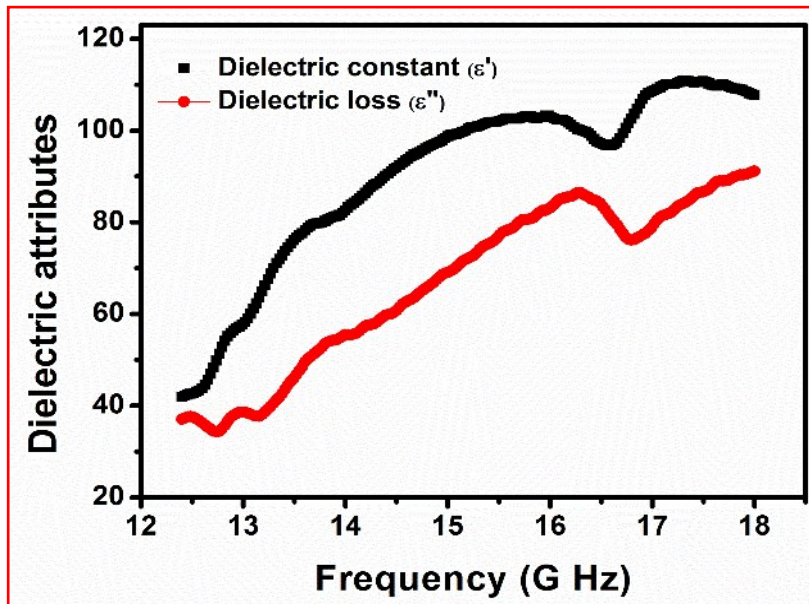


Fig. S5 Real part and imaginary part relative complex permittivity of graphene aerogel in the frequency range 12.4 to 18.0 GHz.

Apparent density measurement method

The apparent density of the GA was calculated by dividing weight by volume. The GA was first cut in the shape of cuboids and weight was measured by electronic balance (least count 0.0001 g). The volume of the GA was calculated simply by multiplying length, breadth and height. The calculated density of the graphene aerogel was obtained to be ~ 75 mg/cm³.