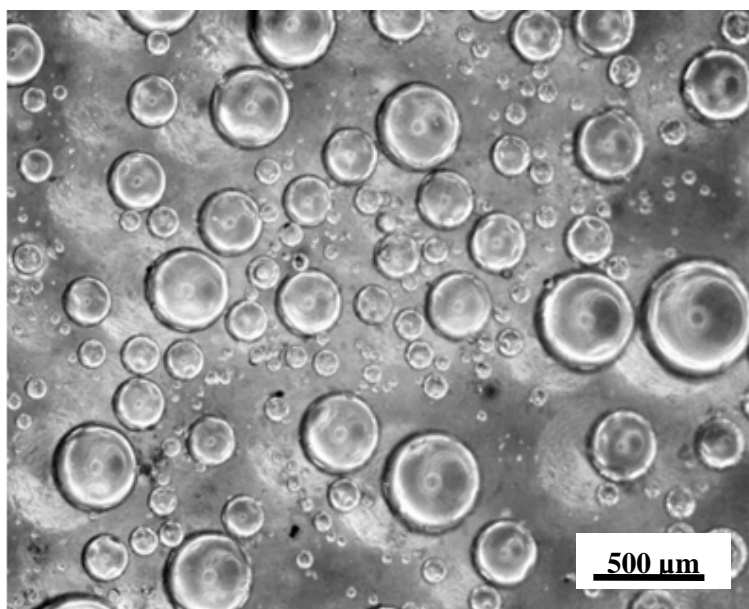


**SUPPLEMENTARY INFORMATION.**

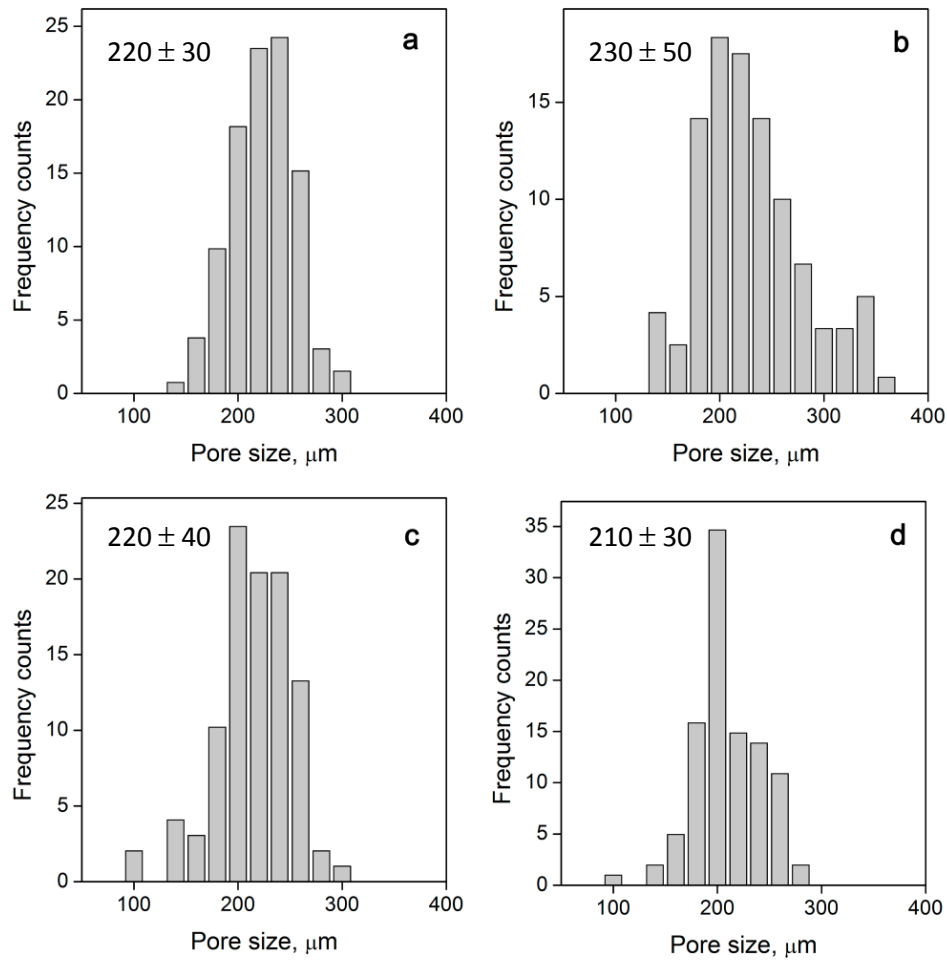
**High porosity scaffold composites of Graphene and Carbon Nanotubes as microwave absorbing materials.**

*Marta González, Juan Baselga, Javier Pozuelo*

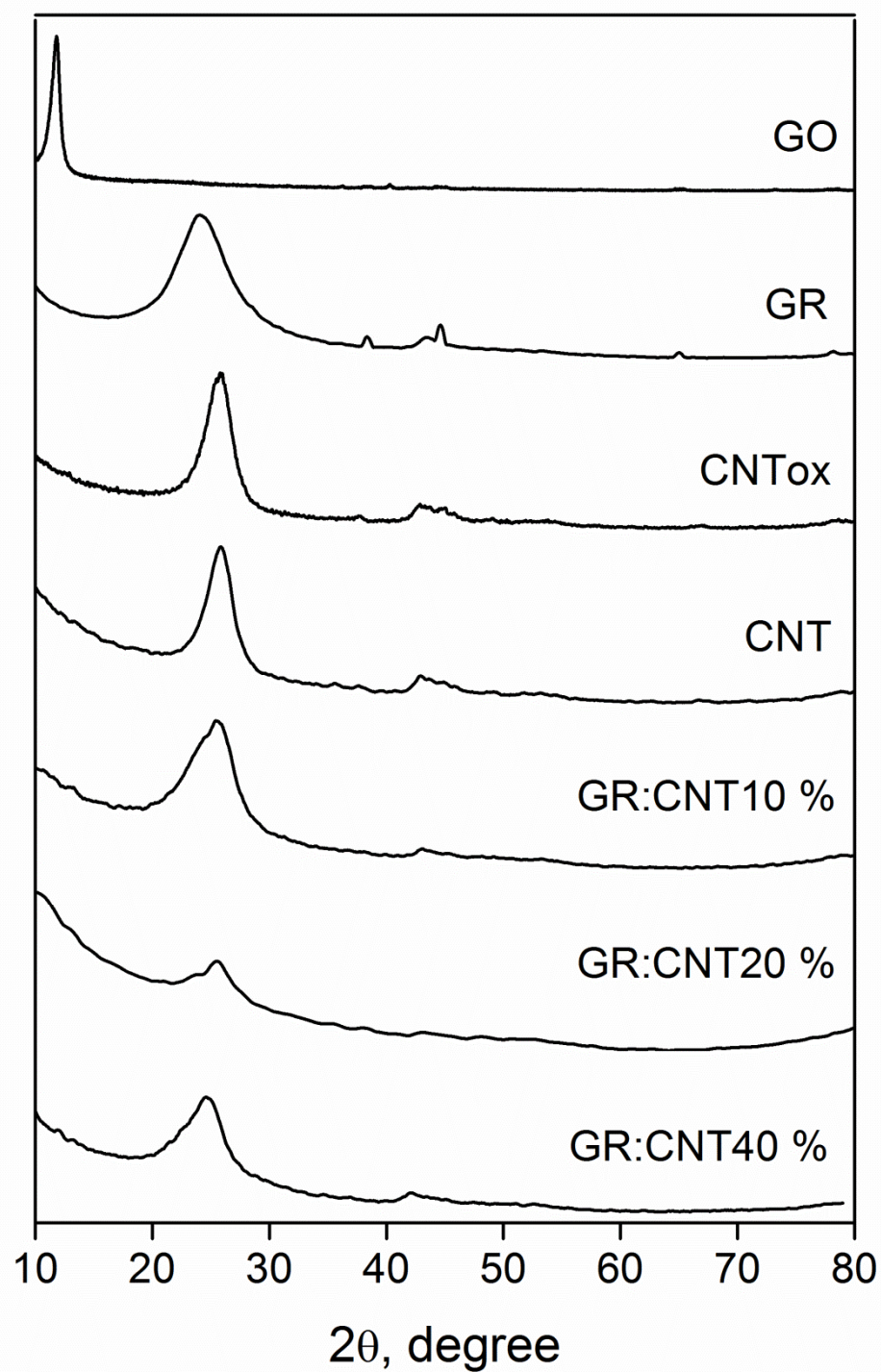
Departamento de Ciencia e Ingeniería de Materiales e Ingeniería Química (IAAB),  
Universidad Carlos III de Madrid, 28911 Leganés, Madrid, Spain.



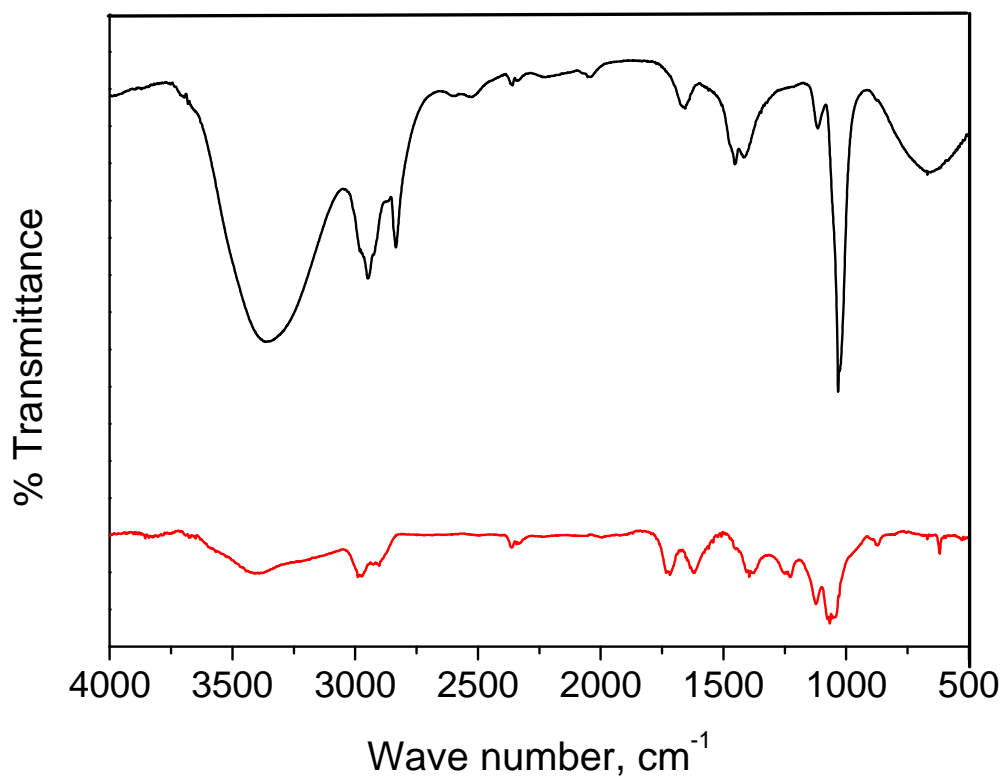
**Figure 1SI.** Optical image of hexane droplets dispersed in water stabilized with GO.



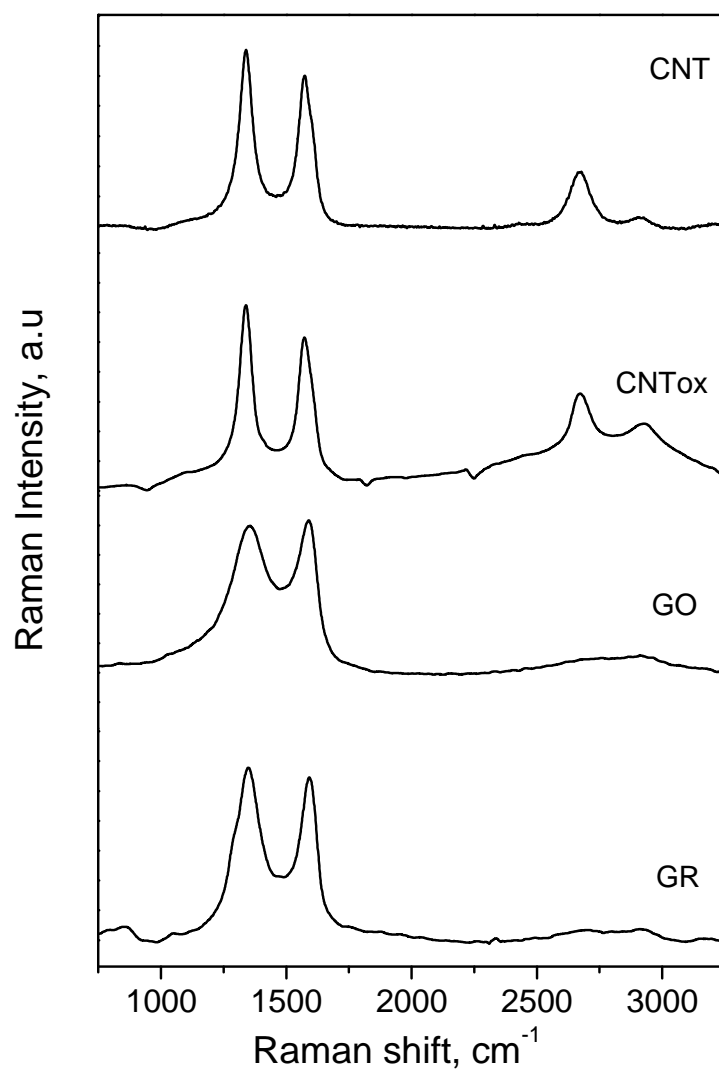
**Figure 2SI.** Size distribution of macropores. GR (a), GR:CNT10% (b), GR:CNT20% (c), GR:CNT40% (d). Mean pores size given in the insets



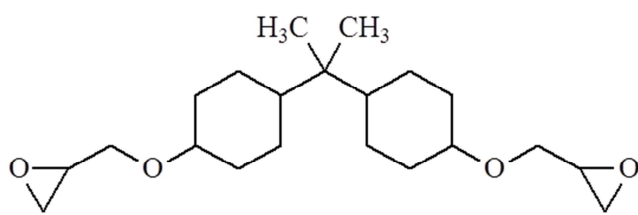
**Figure 3SI.** XRD patterns of the graphene and carbon nanotubes before and after of the hydrothermal treatment



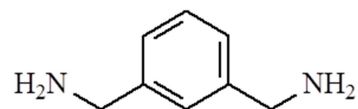
**Figure 4SI.** FTIR spectra of graphene oxide before (black) and after (red) of the hydrothermal treatment



**Figure 5SI.** Raman spectra of the graphene and carbon nanotubes before and after of the hydrothermal treatment.



HDGEBA

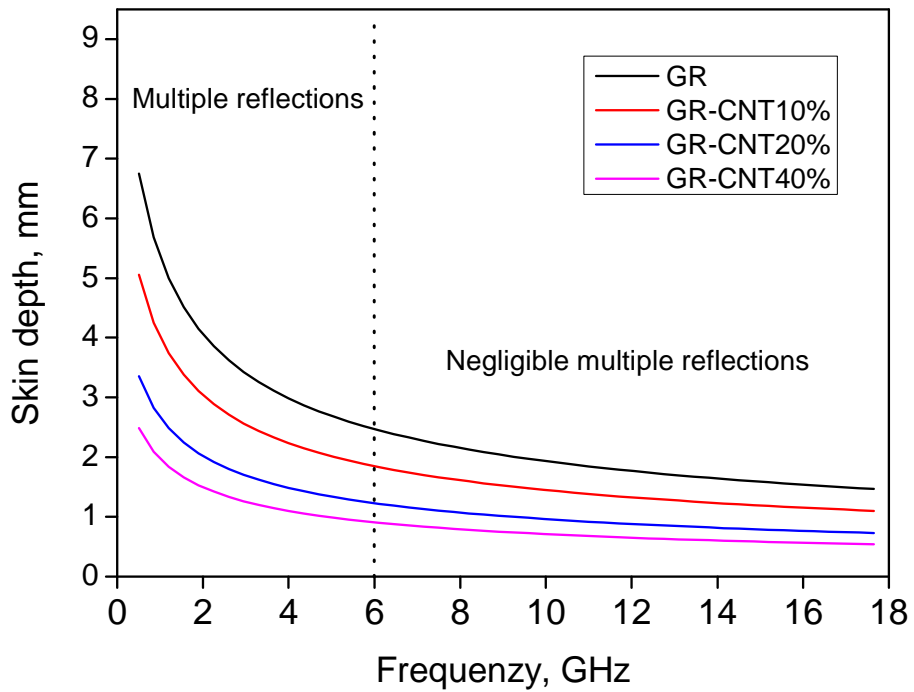


m-Xylylenediamine

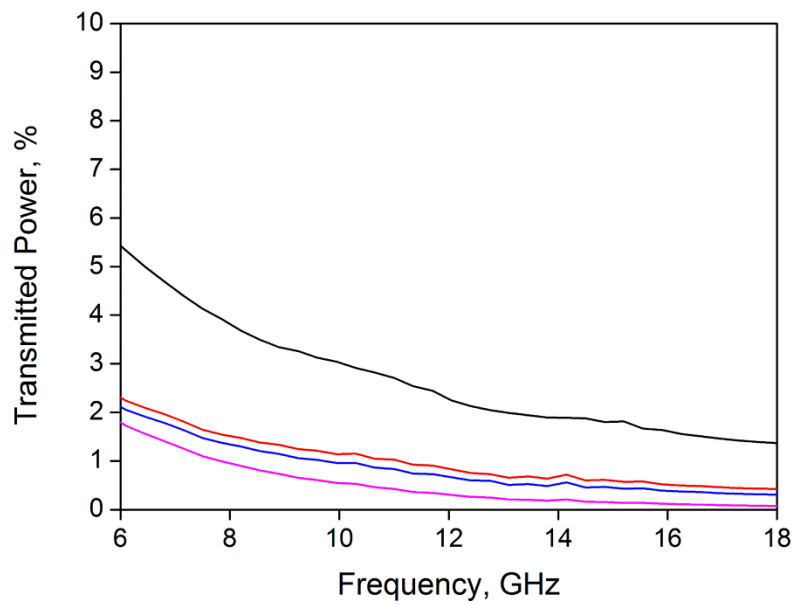
**Figure 6Si.** Hydrogenated Bisphenol A diglycidyl ether (HDGEBA) and m-Xylylenediamine

**Table 1Si.** Glass transition temperatures of GR:CNT:HDGEBA:mXD composites. Glass transition of bulk HDGBA:mXD was 77.6 °C.

|            | CNT Content, % | Glass Transition (T <sub>g</sub> ), °C |
|------------|----------------|--|
| GR         | 0              | 77.8                                   |
| GR:CNT 10% | 10             | 77.1                                   |
| GR:CNT 20% | 20             | 77.3                                   |
| GR:CNT 40% | 40             | 77.6                                   |



**Figure 7SI.** Skin depth of GR (black), GR:CNT10% (red), GR:CNT20% (blue), GR:CNT40% (magenta).



**Figure 8SI.** Transmission coefficient of GR (black), GR:CNT10% (red), GR:CNT20% (blue), GR:CNT40% (magenta). Specimens with thickness of 9 mm.