Supporting Information(ESI)

New Insight into Shape-Controlled Synthesis and microwave shielding properties of iron oxide covered with reduced graphene oxide

Ankit Gupta^{1,2}, Avanish Pratap Singh²,Swati Varshney¹, Narayan Agrawal¹, Pradeep Sambyal², Yashraaj Pandey¹, Bhanu Pratap Singh², V. N. Singh¹, Bipin Kumar Gupta² and S. K. Dhawan^{2,*}

²CSIR-National Physical Laboratory, Dr. K. S. Krishnan Road, New Delhi –110 012 (India)

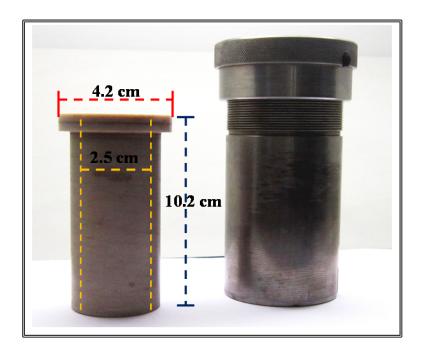


Figure S1: Autoclave used for the Hydrothermal process.

¹ Delhi Institute of Tool Engineering New Delhi –110 020 (India)

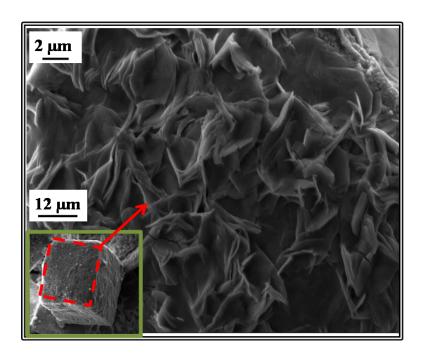


Figure S2: Magnified view of SEM micrograph of iron oxide cubes.

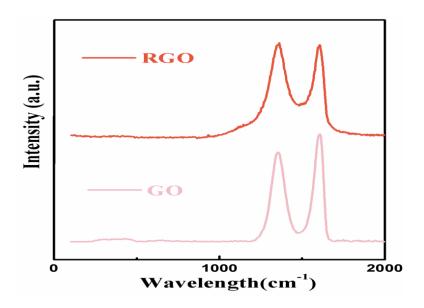


Figure S3: Raman spectra of GO and RGO.

Table S2: ID/IG ratio of different samples.

SAMPLES	D-Band (cm ⁻¹)	G-Band (cm ⁻¹)	ID/IG
GO	1357.27	1609.03	0.84
RGO	1357.17	1603.85	1.001
RRods	1304.7	1588.48	1.66
RCubes	1309.88	1586.11	1.19
RFlakes	1309.76	1586.08	1.23

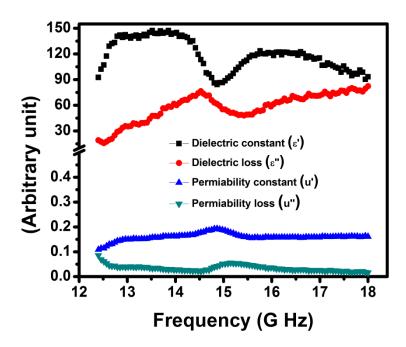


Figure S4: Behavior of complex permittivity and complex permeability of rod shaped iron oxide/RGO composite in Ku band frequency range.