


A Magnetic X-Band Frequency Microwave Nanoabsorbent Made of Iron Oxide/Halloysite Nanostructures Combined with Polystyrene

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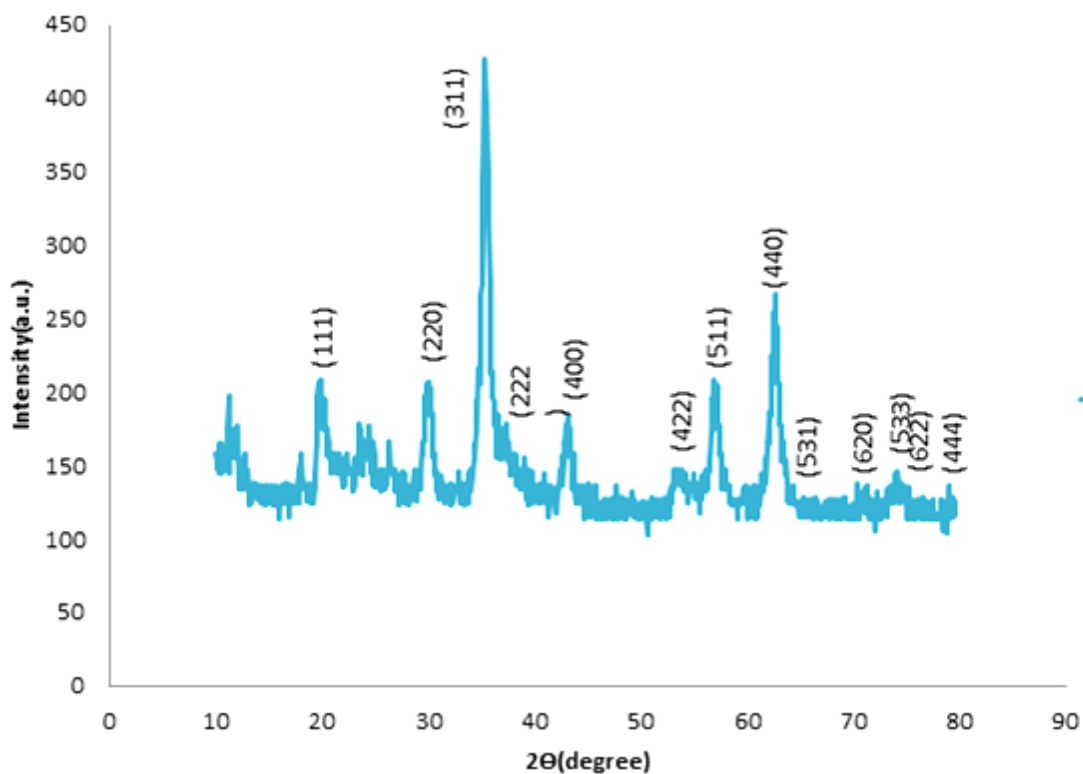


Figure S1. XRD pattern of the neat Fe₃O₄ NPs.

The crystal structure of the neat Fe₃O₄ NPs was studied by the X-ray diffraction (XRD) analysis. It can be seen that the diffraction peaks of the Fe₃O₄ NPs are well confirmed by the reference JCPDS card (NO. 00-024-0072); $2\theta = 33.115^\circ, 35.612^\circ, 54.005^\circ, 57.508^\circ, 62.385^\circ, 63.966^\circ, \text{ and } 75.409^\circ$.

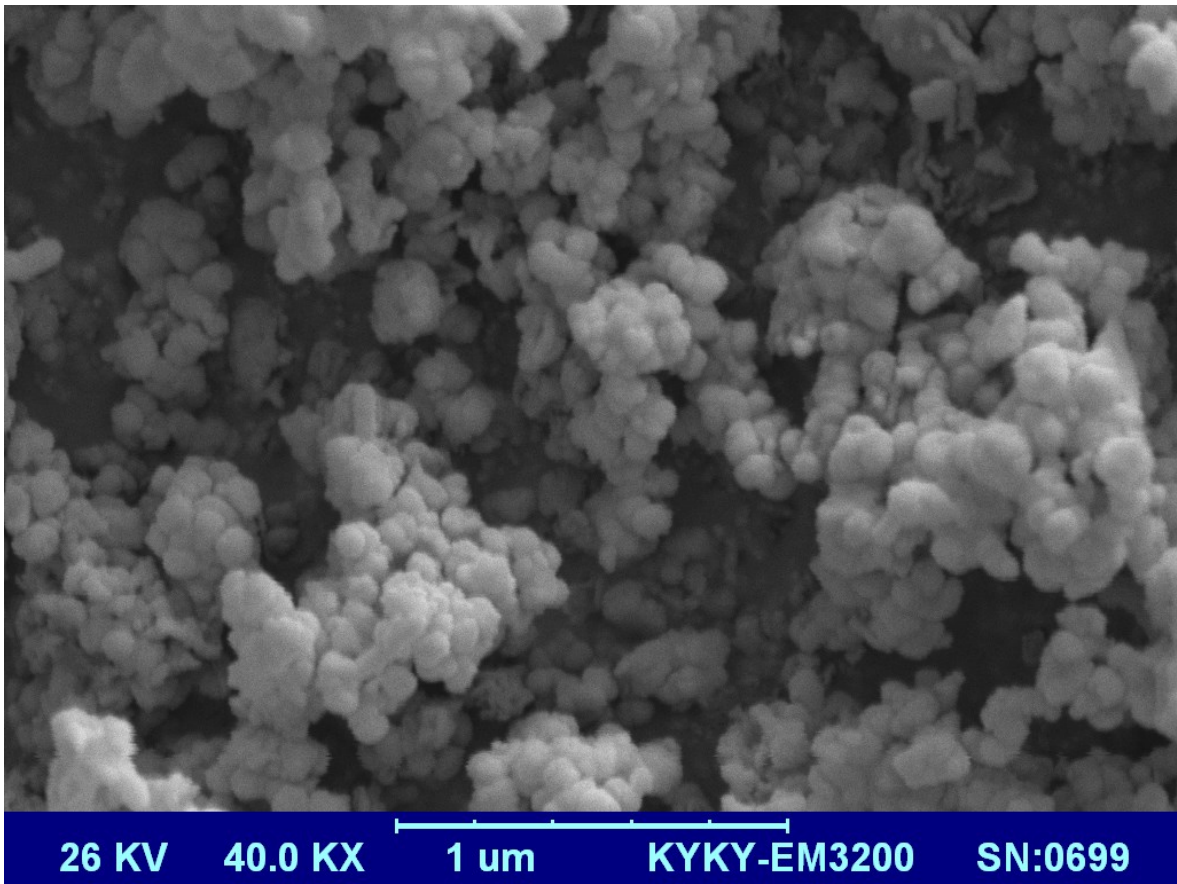


Figure S2. SEM image of the neat Fe₃O₄ NPs.

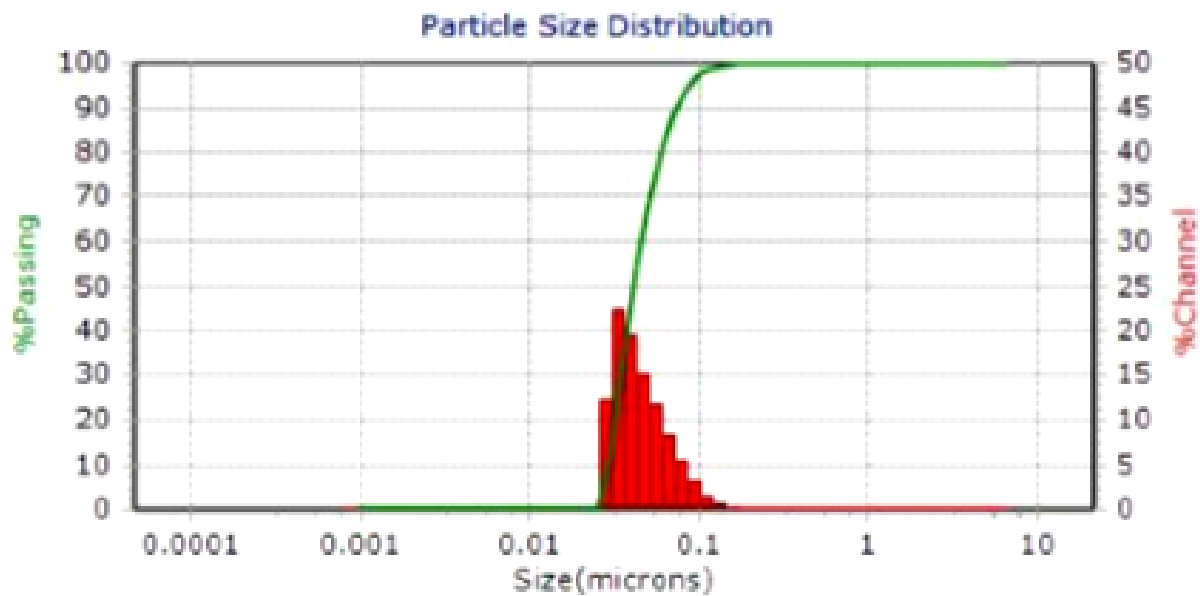


Figure S3. DLS curve of the neat Fe₃O₄ NPs.

Dynamic Light Scattering (DLS) analysis of the neat Fe₃O₄ NPs is shown in Figure S3. Mean particle size in the colloidal state was recorded for this sample is the between 0.04 - 0.1 microns (40-100 nm).