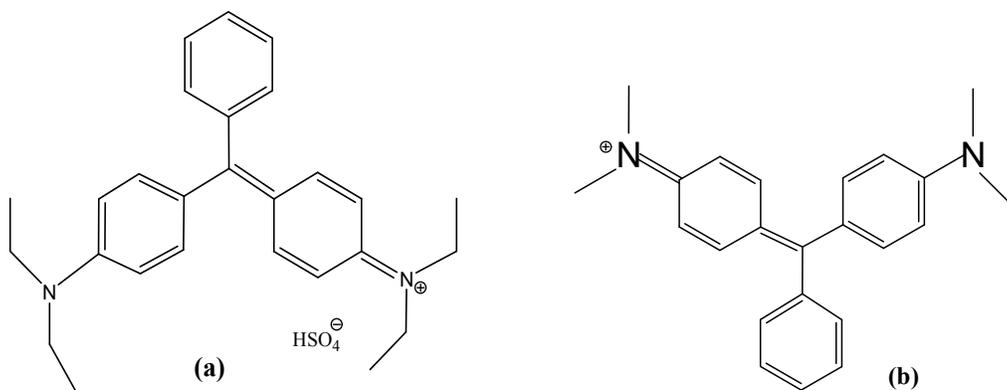


Supplementary data



Scheme 1. The molecular structures of Brilliant green (BG) (a) and Malachite green (MG) (b).

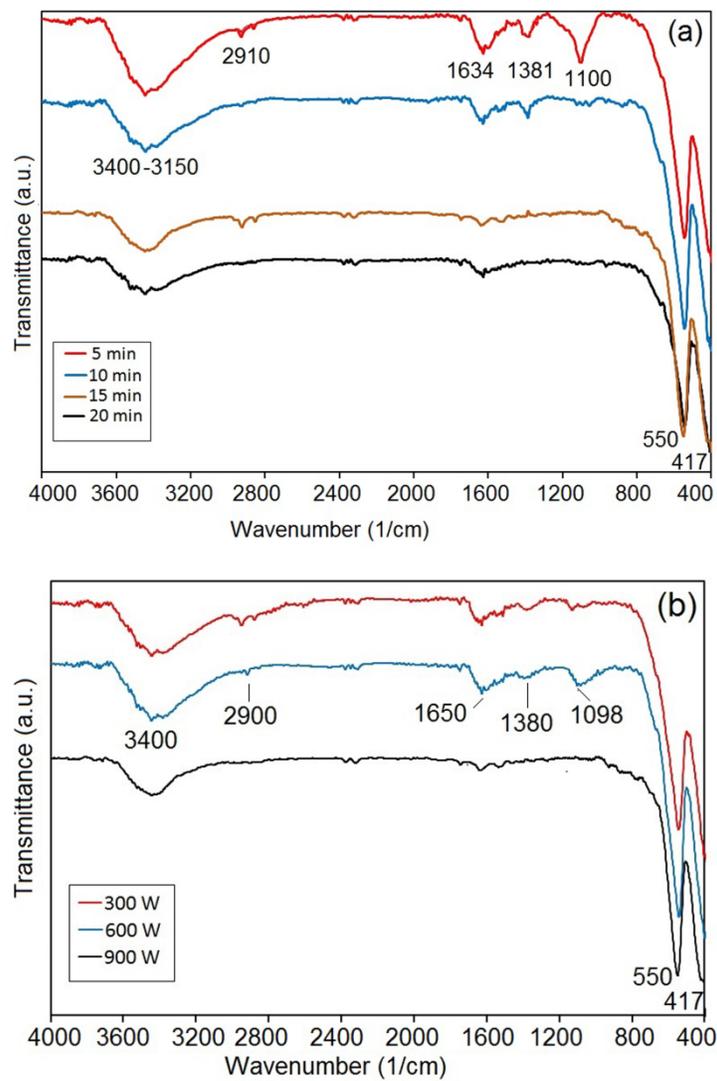


Fig. S1. FT-IR spectra of the resulting products at the different time reaction (a) and microwave power (b) by urea/nitrate model.

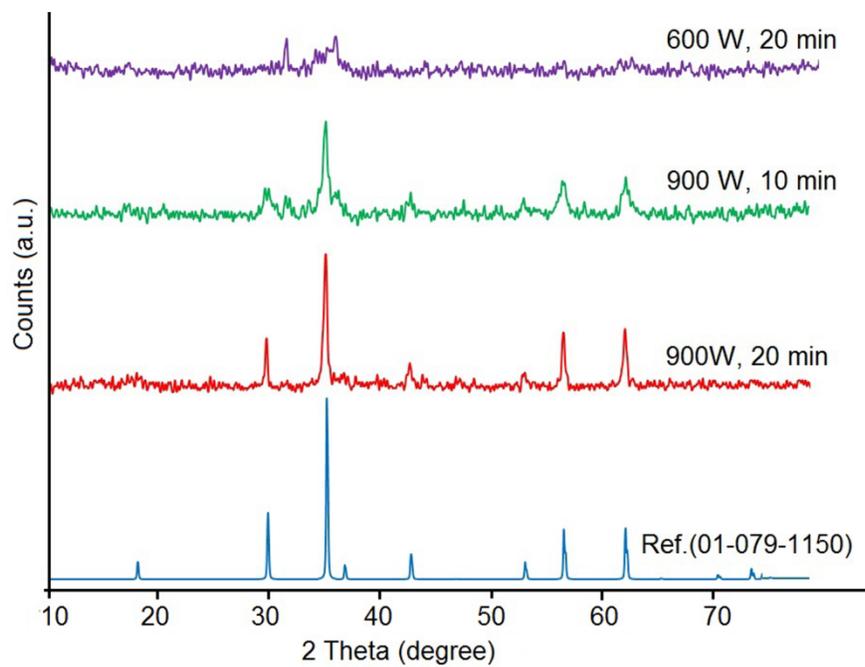


Fig. S2. XRD patterns of the prepared products at the different reaction time and power by using urea/nitrate model.

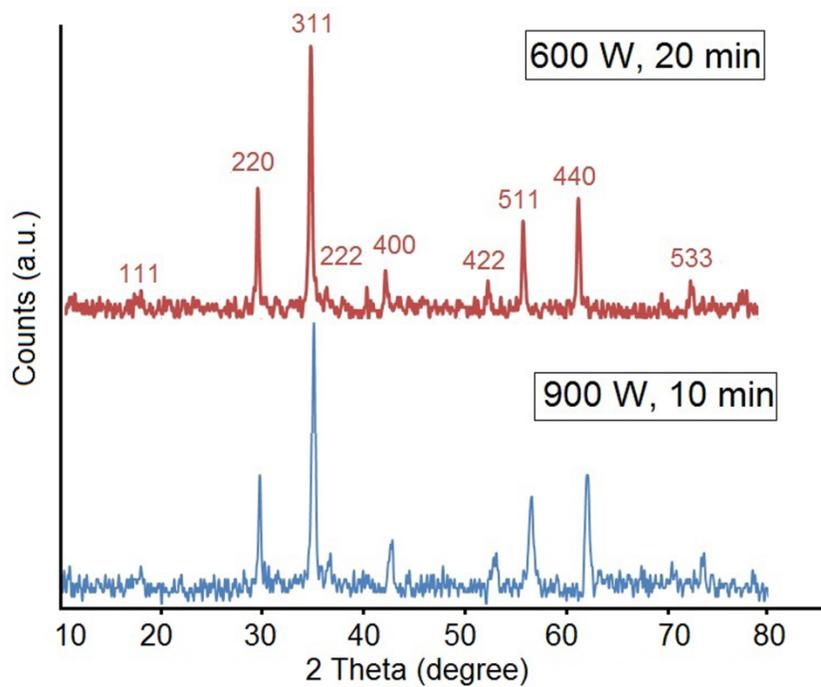


Fig. S3. XRD patterns of the prepared products at the different reaction time and power by using Gly/nitrate model.

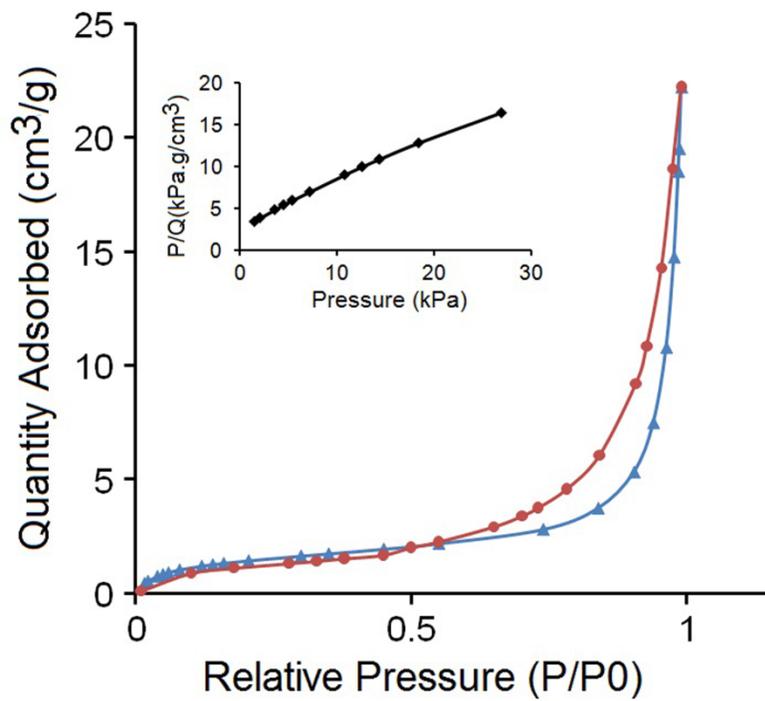


Fig. S4. Nitrogen adsorption (▲) and desorption (●) isotherm for the commercial organoclay.

The inset shows Langmuir surface area plot of this sample.

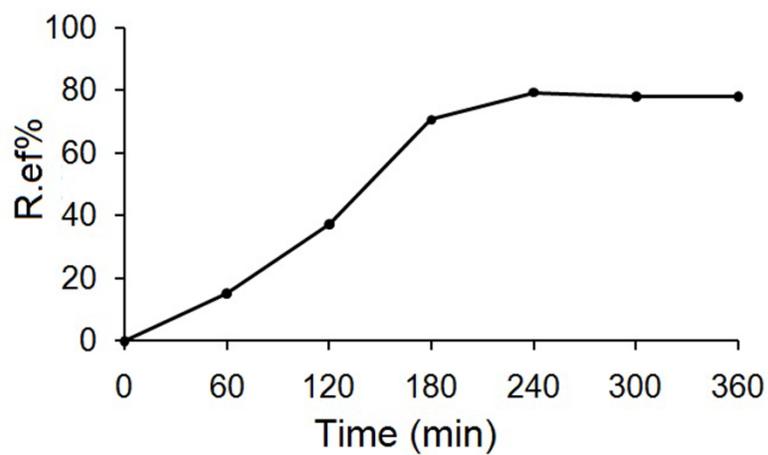


Fig. S5. Removal of dye pollutant in various times. Conditions: 0.02 g nanohybrid, 50 mL of 50 mg L⁻¹ BG and neutral pH.

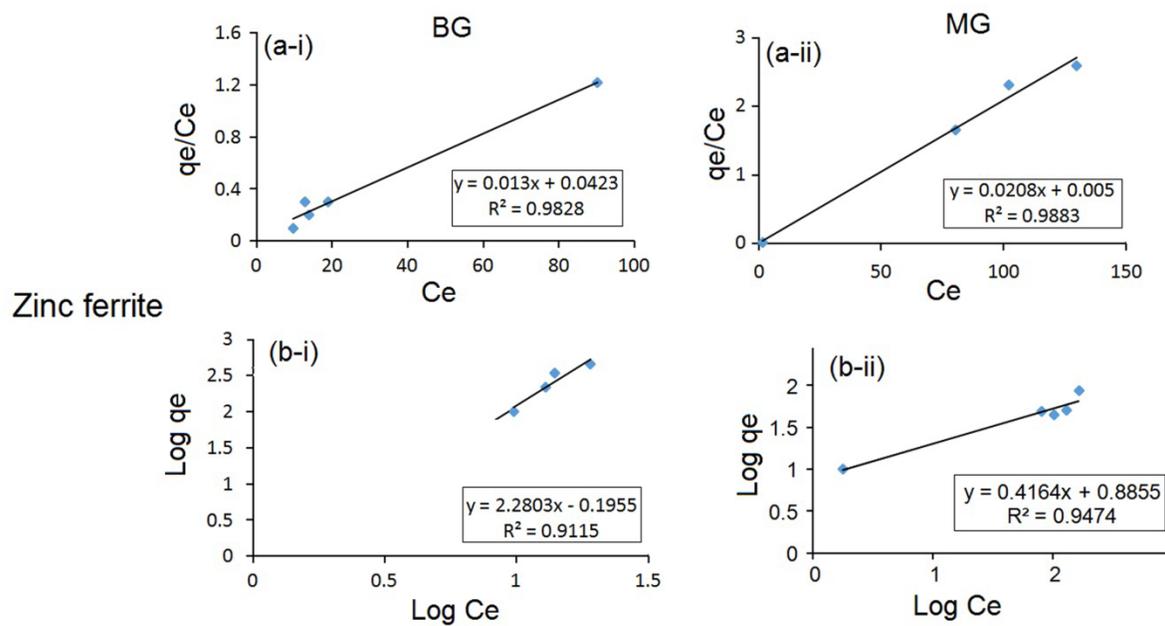


Fig. S6. The plots of Langmuir (a-i and a-ii) and Freundlich (b-i and b-ii) of produced zinc ferrite nanoparticles for the adsorption of BG and MG dye pollutants.

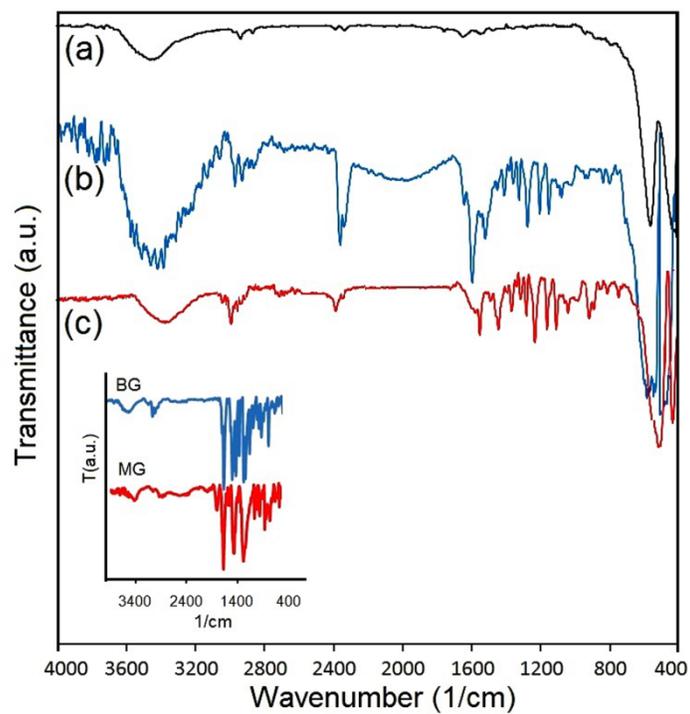


Fig. S7. FT-IR spectra of the prepared ZnFe₂O₄ during adsorption treatment; before (a) and after adsorption of BG (b) and MG (c) dye pollutants, the FT-IR spectra of BG and MG dye pollutants in the inset.