

## Magnetic GO/Fe<sub>3</sub>O<sub>4</sub> for rapid malachite green (MG) removal from aqueous solutions: a reversible adsorption

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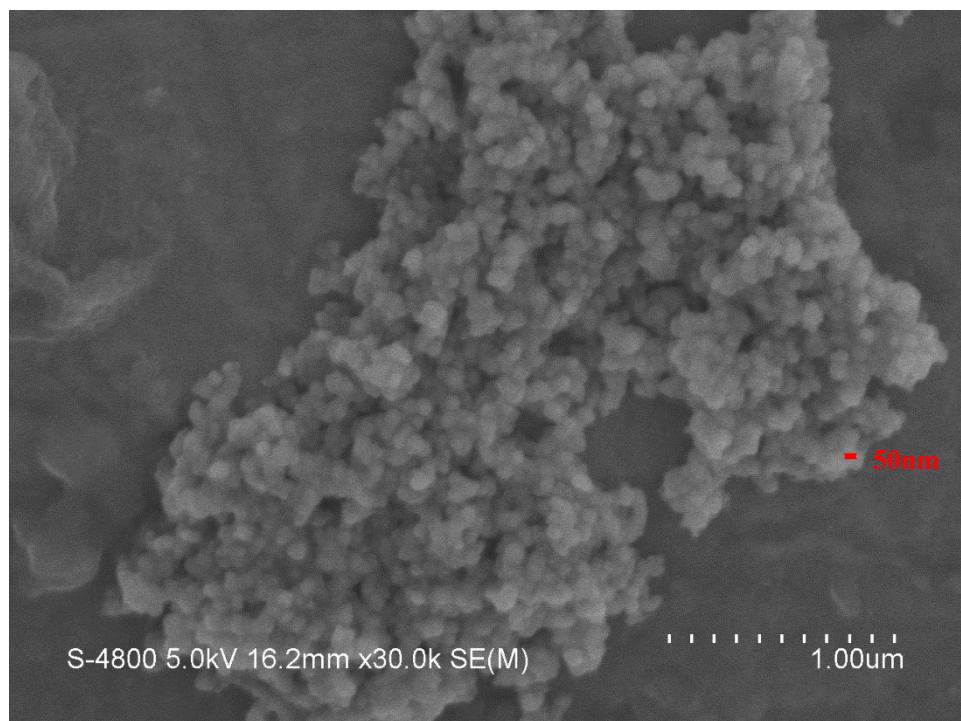
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**Fig.S1.** The morphology of GO/ Fe<sub>3</sub>O<sub>4</sub> in SEM

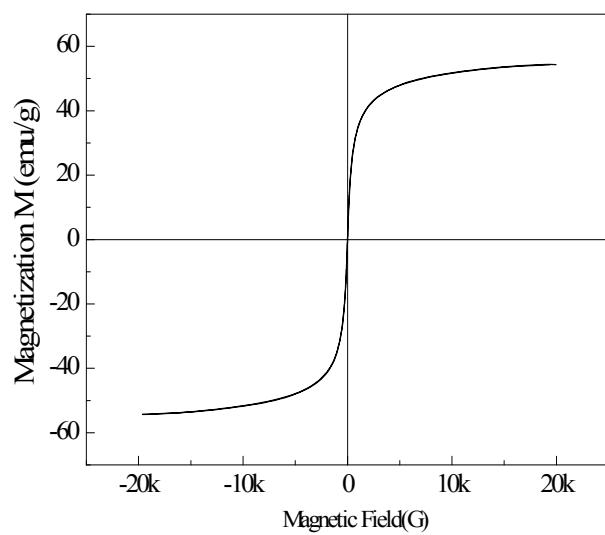
**Fig.S2.** Magnetization vs applied magnetic field for GO/Fe<sub>3</sub>O<sub>4</sub>

**Fig.S3.** Adsorption isotherms of Freundlich (A) and Langmuir (B) fitted to MG adsorption

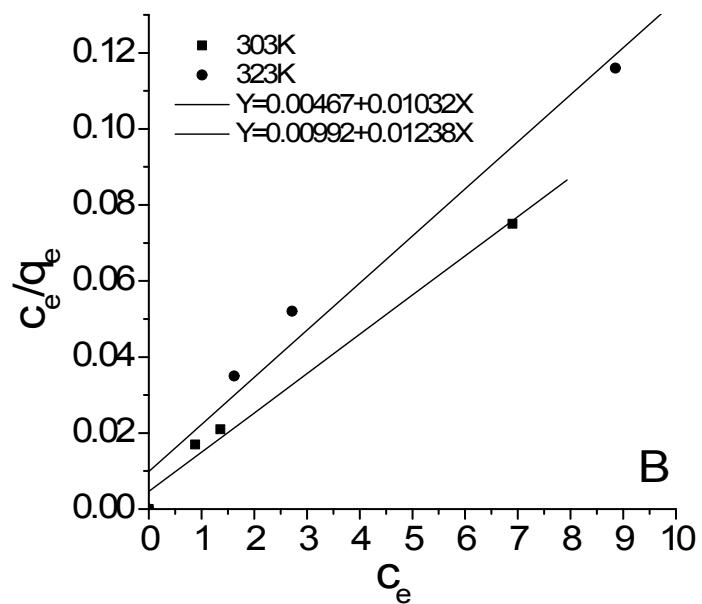
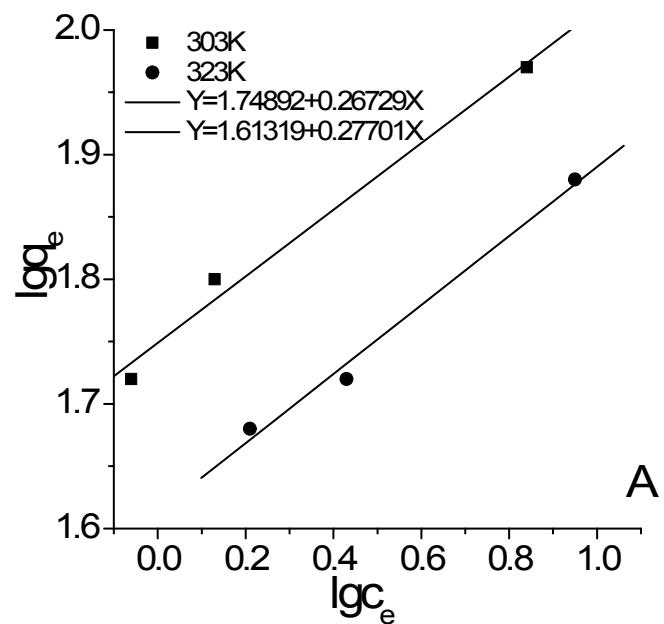
**Fig.S4.** Adsorption kinetics of MG confirmed by (A); pseudo-first and (B) pseudo-second kinetics



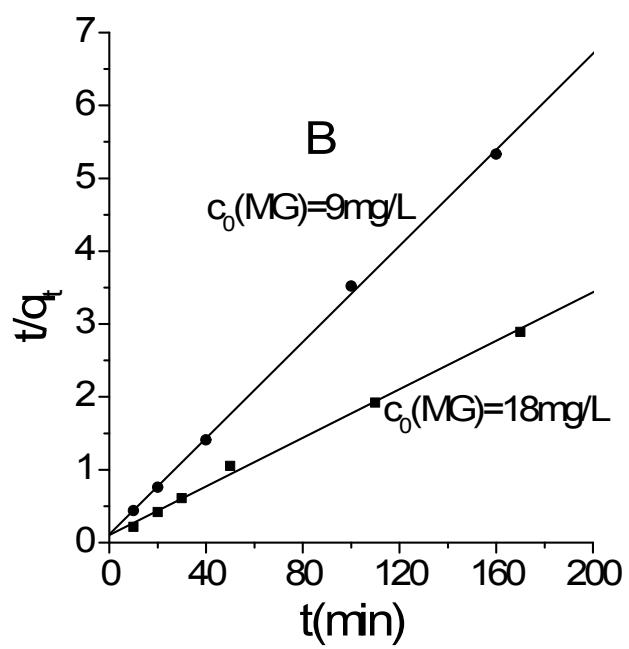
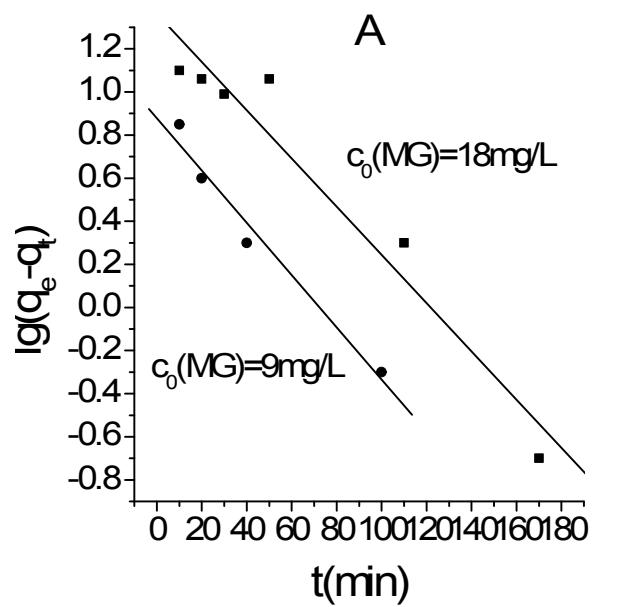
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**Fig.S2.** Magnetization vs applied magnetic field for GO/ $\text{Fe}_3\text{O}_4$



**Fig.S3.** Adsorption isotherms of Freundlich (A) and Langmuir (B) fitted to MG adsorption



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