

***Electronic Supplementary Information***

**Magnetic and conductive graphene papers toward thin layers of effective electromagnetic shielding**

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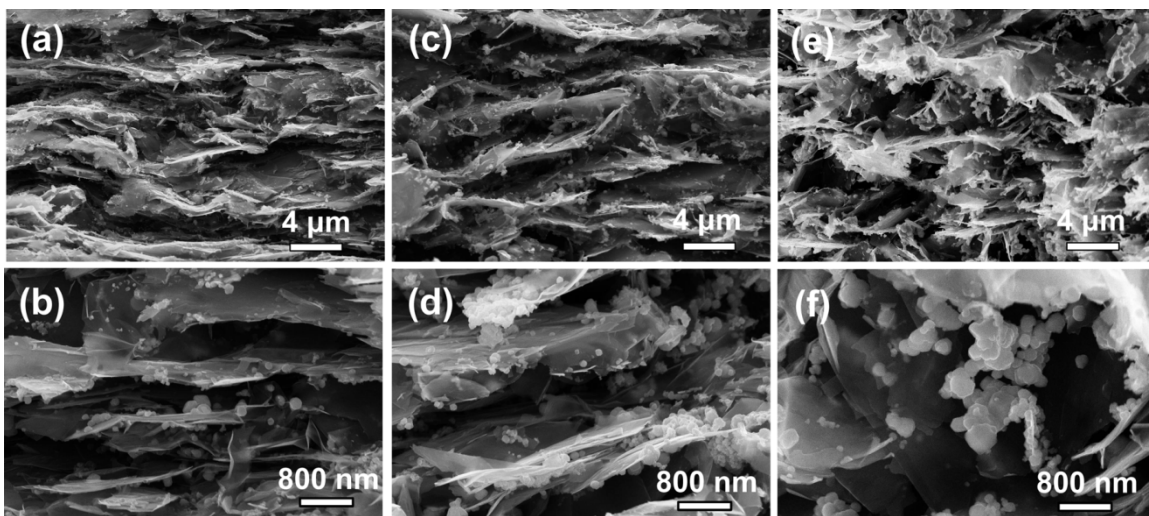


Figure S1 SEM images of the cross-section views on  $\text{Fe}_3\text{O}_4/\text{GN}$ -1 (a) and (b),  $\text{Fe}_3\text{O}_4/\text{GN}$ -2 (c) and (d),  $\text{Fe}_3\text{O}_4/\text{GN}$ -4 (e) and (f).

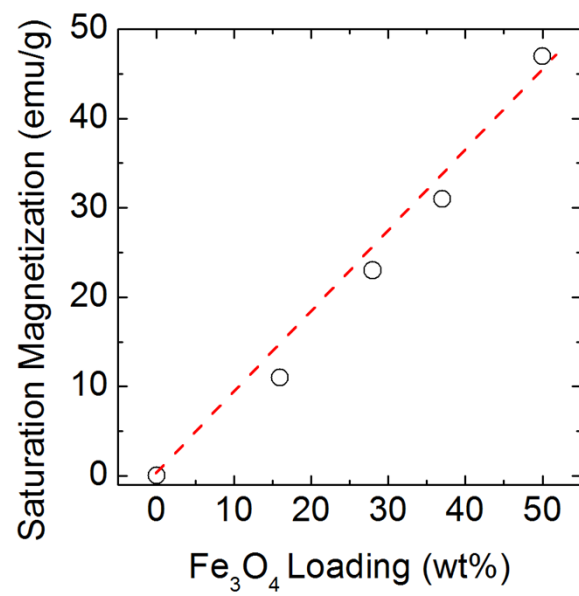


Figure S2 Relation of saturation magnetization and  $\text{Fe}_3\text{O}_4$  loadings.



Figure S3. Fabrication of Fe<sub>3</sub>O<sub>4</sub>/RGO hybrids with 50 wt% Fe<sub>3</sub>O<sub>4</sub>.