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Figure S1. XRD patterns of the pure Fe<sub>3</sub>O<sub>4</sub> (A) and MCGO(B).



Figure S2. TEM images of GO (A) and MCGO(B).

We found that the stirring speed of 1000 r/min and stirring time of 36 h could not cause the partial breakage of the MCGO during the heavy metal ions removal experiments. Moreover, individual MCGO could suffer from the mechanical manipulation with strength as high as 1.5 N without partial breakage. These results suggest the mechanical strength of MCGO is excellent, benefiting from GO.