

Supplementary Information

Metastable Intermolecular Composites of Al and CuO Nanoparticles Assembled with Graphene Quantum Dots

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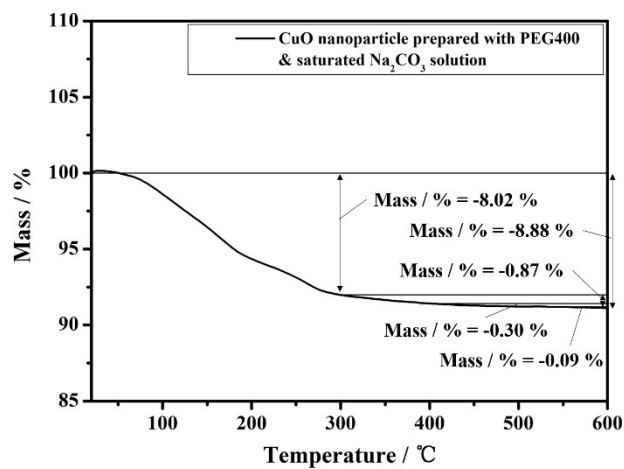


Figure S1. Thermogravimetric Analysis of the as-prepared CuO NPs.

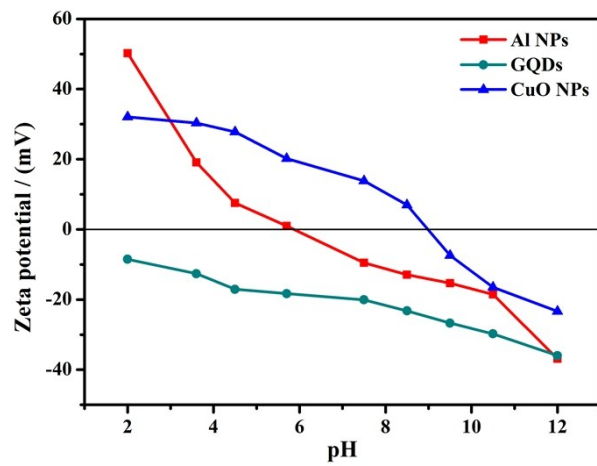


Figure S2. Zeta potential of Al NPs, GQDs and CuO NPs at different pH values.

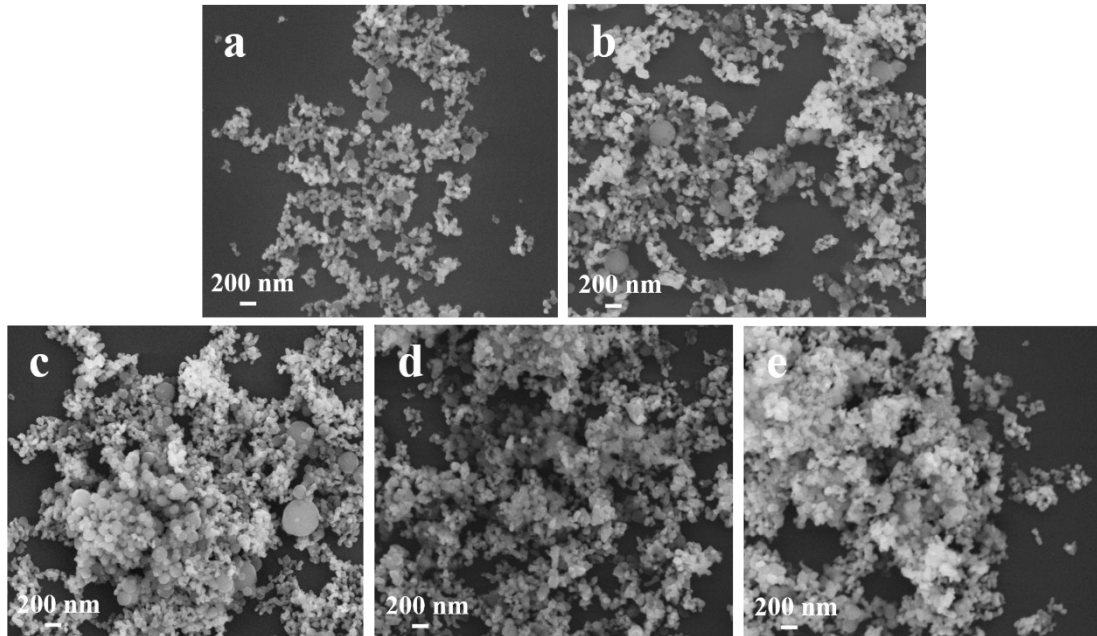


Figure S3. SEM images of the Al/GQDs/CuO MICs assembled at 30 °C with Al:GQDs:CuO ratios of 20:0:90 (a), 20:0.5:90 (b), 20:2:90 (c), 20:5:90 (d), 20:10:90 (e).

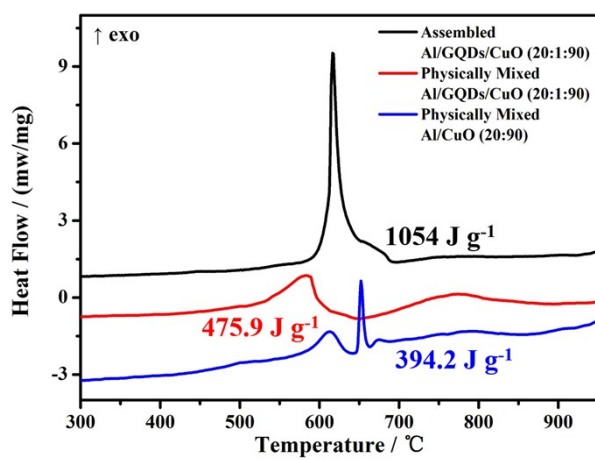


Figure S4. DSC curves of assembled Al/GQDs/CuO MICs, physically mixed Al/GQDs/CuO and physically mixed Al/CuO.

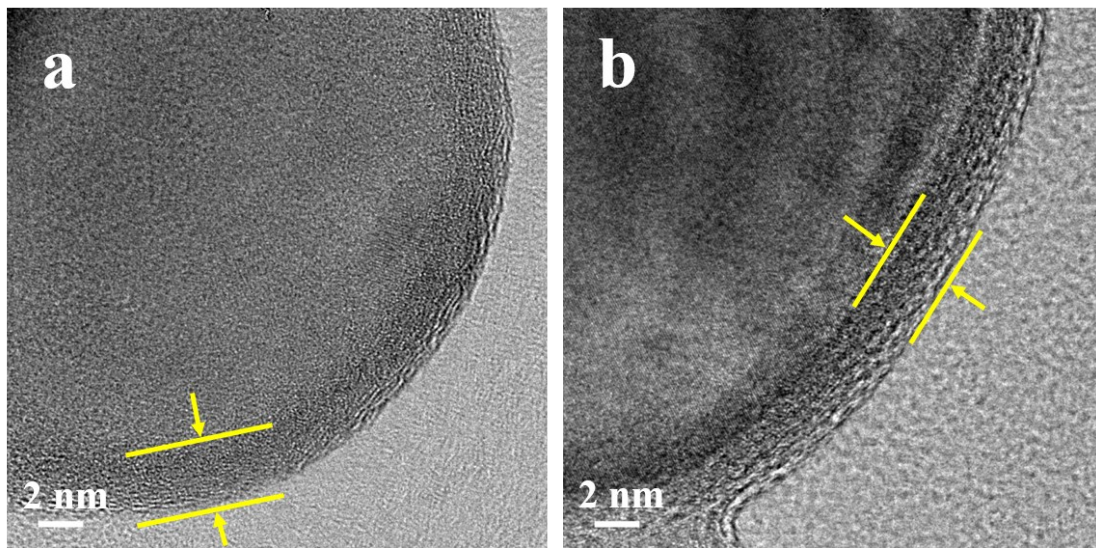


Figure S5. TEM image of Al NPs before (a) and after (panel b) the acid whittling partially of the native oxide layer.

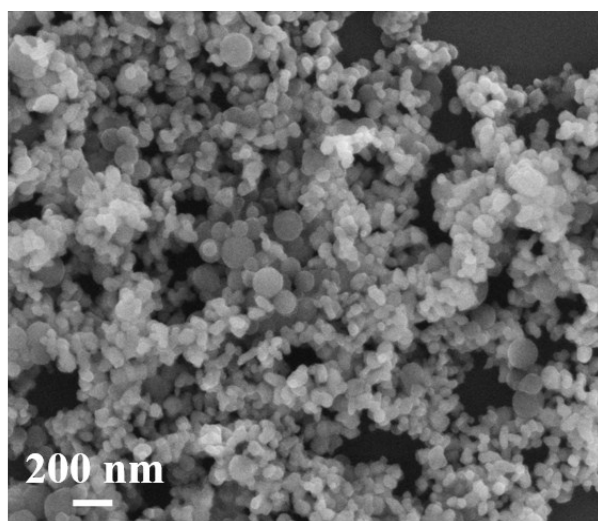


Figure S6. SEM image of the Al/GQDs/CuO MICs with Al:GQDs:CuO ratio of is 20:1:90 after acid whittling.