

Supporting Information

Oxygen Reduction Reaction in Electrochemically Reduced Graphene Oxide

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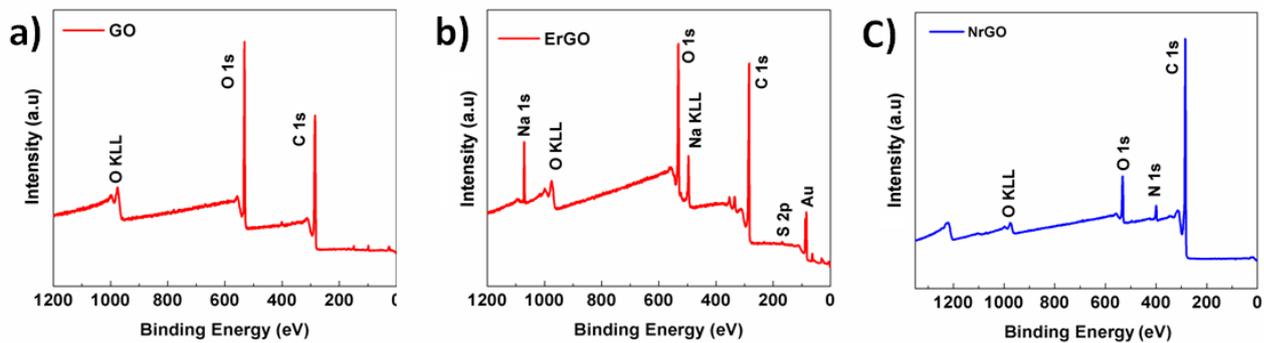


Fig. S1: (a-c) survey XPS spectra of GO, ErGO and NrGO.

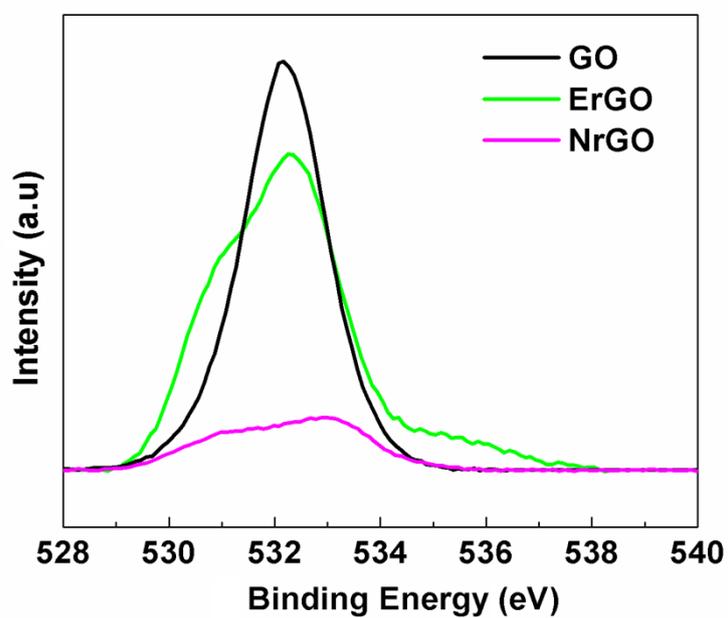


Fig. S2: Shows the high resolution O 1s XPS spectra of GO, ErGO and NrGO.

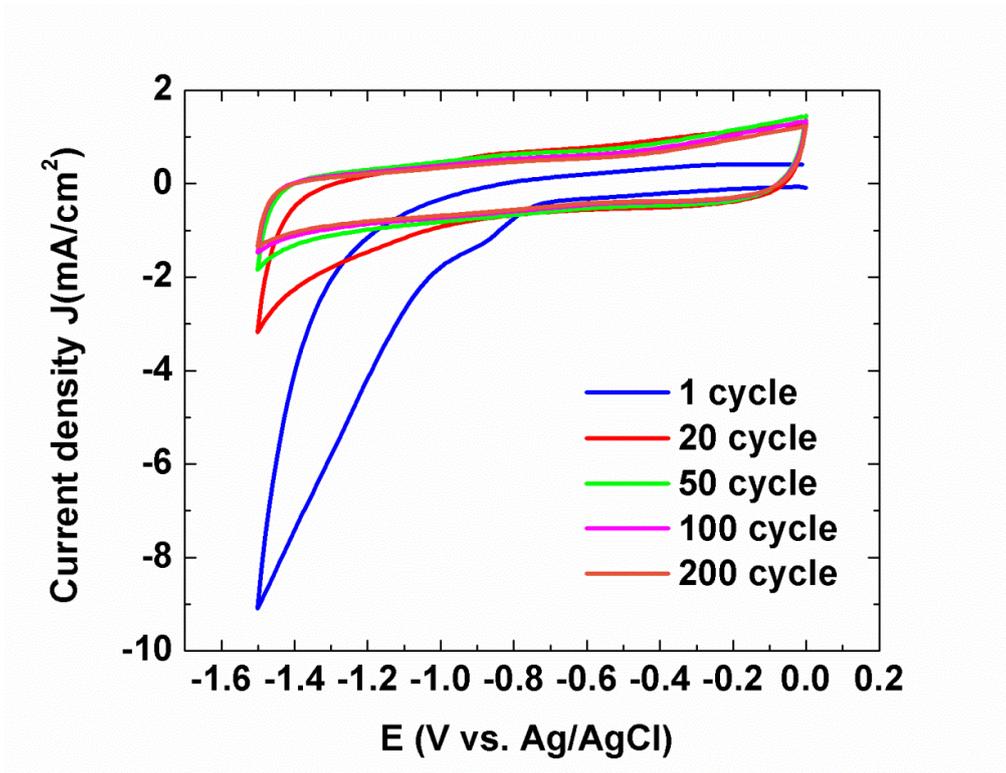


Fig. S3: Cyclic voltammograms of GO/GCE in N_2 saturated 0.1 M Na_2SO_4 aqueous solution

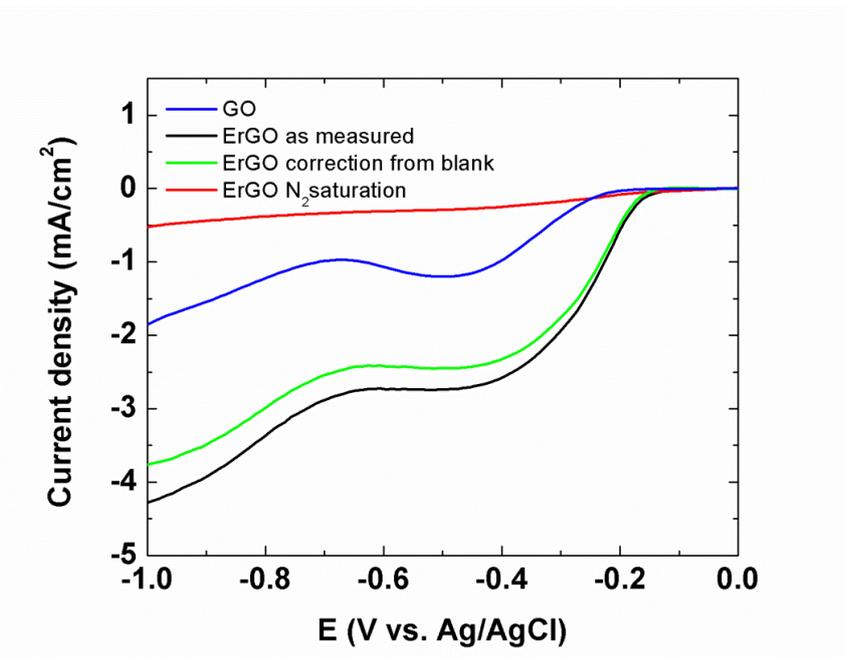


Fig. S4: LSV of 20 μg of GO (blue) in O_2 saturated 0.1 M KOH electrolyte and LSV of 22 CV reduced ErGO in O_2 (black), N_2 saturated (red) and correction from N_2 saturation (green) 0.1 M KOH in at a scan rate of 10 mV/s and a rotation rate of 1600 rpm.

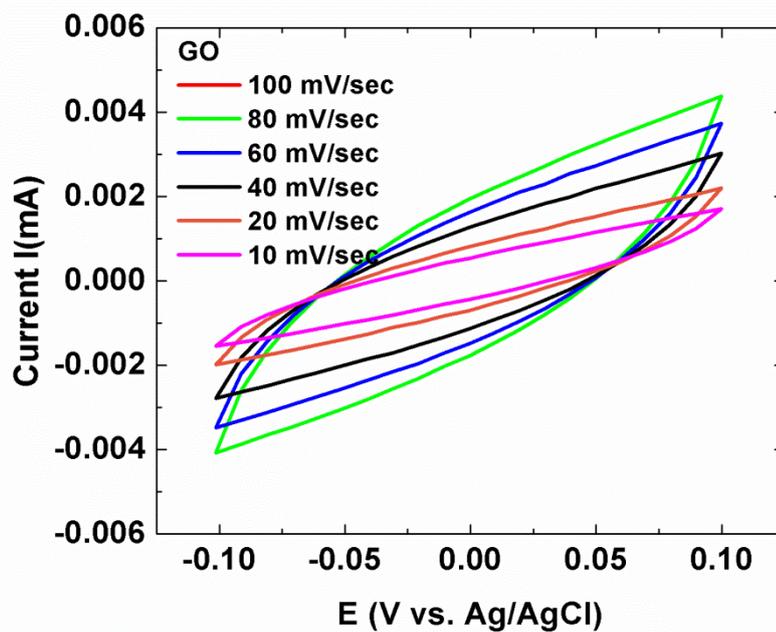


Fig. S5: (a) Cyclic voltammograms of GO and in the potential range of -0.1 V to +0.1 V vs. Ag/AgCl (non-Faradaic region) at scan rates of 100 mV/sec, 80 mV/sec, 60 mV/sec, 40 mV/sec, 20 mV/sec and 10 mV/sec in N_2 saturated 0.1 M KOH solution.

Table S1: shows the C_{dl} and EASA of GO and ErGO.

Material	C_{dl} (mF) (20 μ g of each material)	EASA(cm^2) (20 μ g of each material)
GO	0.023	0.076
ErGO	0.35	1.16

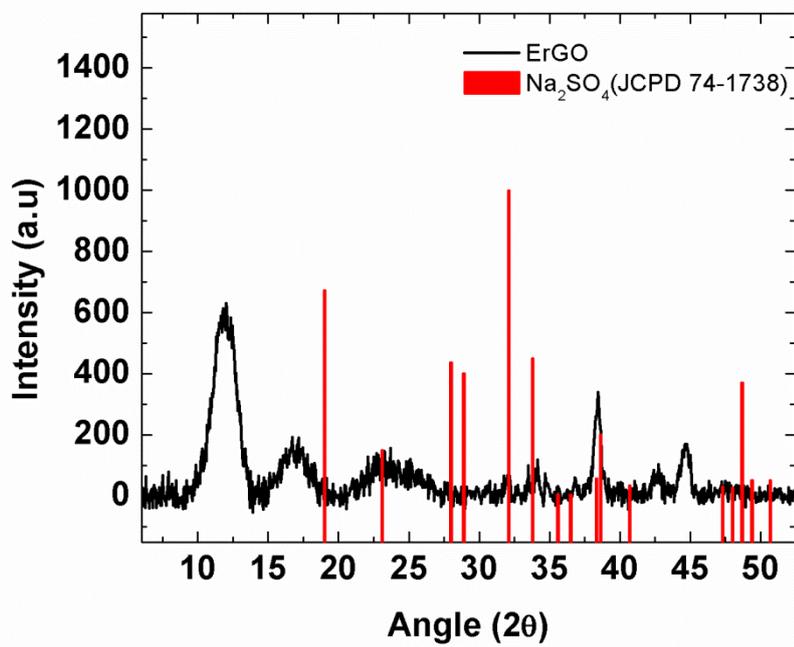


Fig S6: XRD of ErGO and Na₂SO₄