Electronic Supplementary Information for:

Synthesis of TiO_2/rGO Composites with Different Morphologies and Their Electrocatalysis for Oxygen Reduction Reaction

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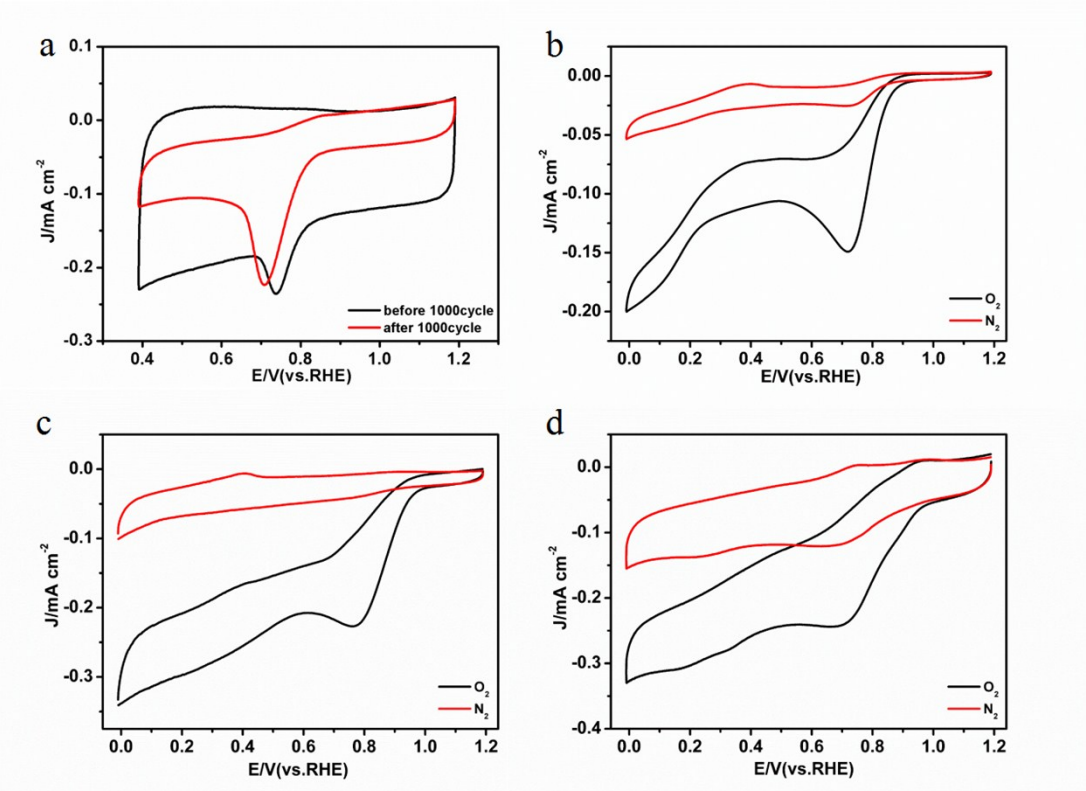

Figure S1. The CV curves of rGO (a), TiO_2 (b), TiO_2/rGO (truncated octahedral) (c), and TiO_2/rGO (elliptical) (d) in N_2 and O_2-saturated 0.1 M KOH solution at scanning rate of 10 mV s^{-1}.

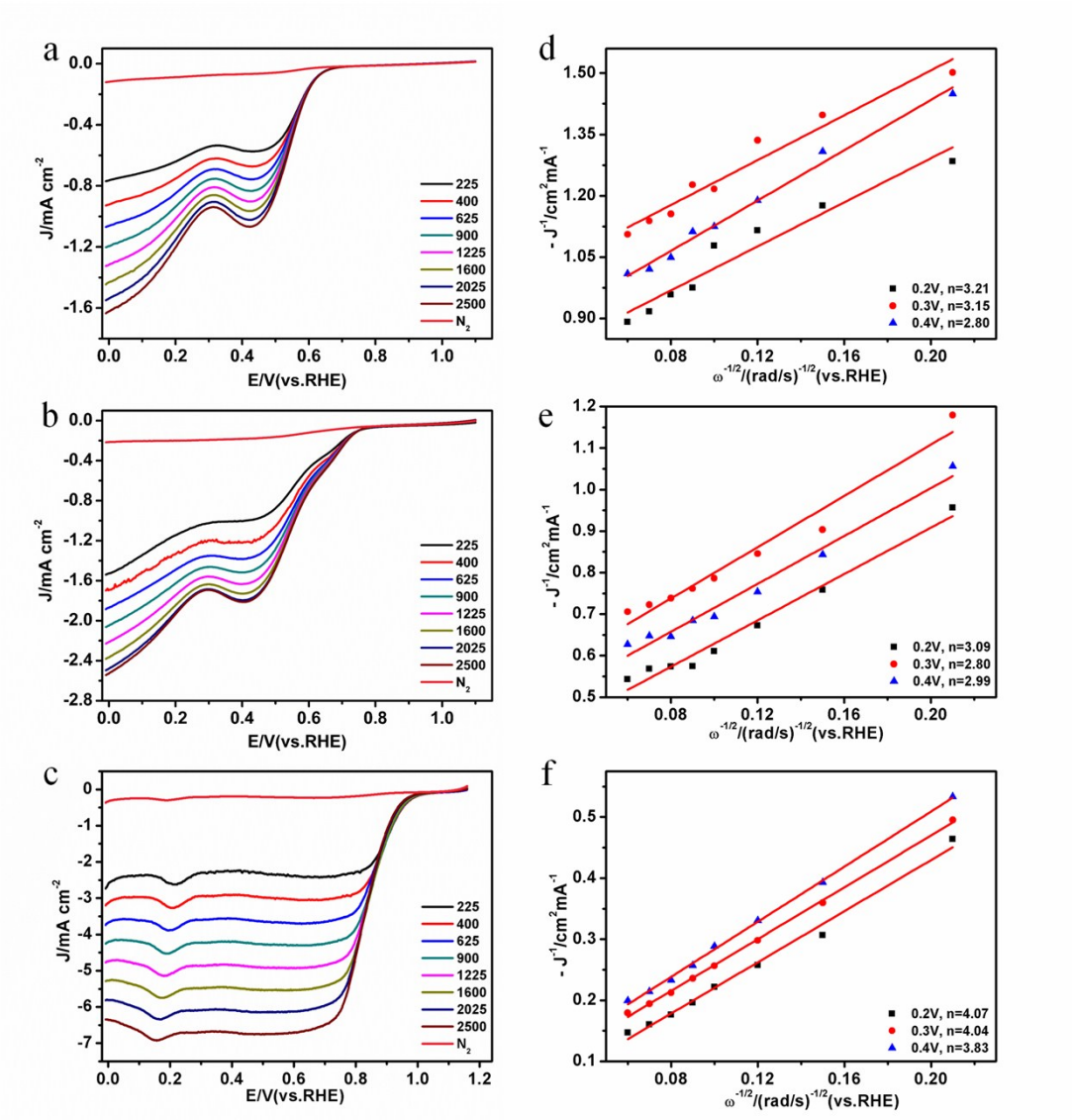

Figure S2. LSV curves of (a) TiO_2, (b) rGO, and (c) Pt/C in O_2 saturated 0.1 M KOH solution with various rotation rates at a scan rate of 10 mV s^{-1}; Koutecky-Levich plots for (d) TiO_2, (e) rGO, and (f) Pt/C at different electrode potentials.

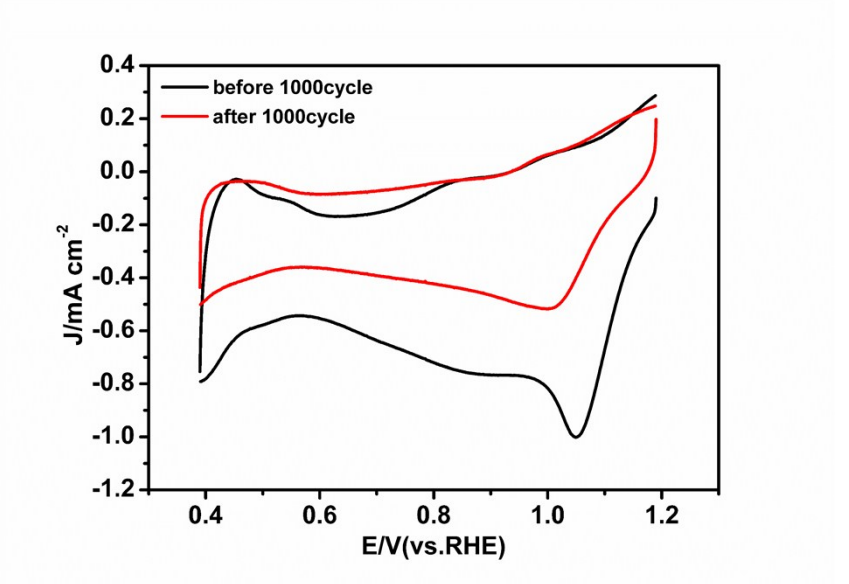

Figure S3. The CV curves of Pt/C in O_2-saturated 0.1 M KOH solution (scanning rate:20 mV s^{-1}) under 1000 cycle.

Table S1. Physical parameters of different catalysts in O_2 saturated 0.1 M KOH at 1600 rpm[a]

Materials	morphology	Onset/V[b]	J/mA cm^{-2}	n	Ref.[c]
TiO_2/rGO	Octahedral	0.85	4.18	3.87	This work
TiO_2/rGO	Truncated Octahedral	0.79	2.47	3.05	This work
TiO_2/rGO	Elliptical	0.76	2.41	3.06	This work
TiO_2	Octahedral	0.68	1.44	3.16	This work
rGO	Amorphous	0.75	2.39	2.96	This work
Pt/C	Amorphous	0.95	5.19	3.98	This work
TiO_2/rGO	Amorphous	0.83	4.21	3.98	Ref. 21

[a] All the potential values from references were converted to vs. RHE for comparison.

[b] In order to minimize the effect of residual currents on the potential value, the onset potential in this research has been defined as a potential required for generating an ORR current density of 0.1 mA cm^{-2} in the LSV measurement.

[c] Ref. 21 have been cited references in the revised manuscript.

Table S2. Peak area percentage of C, O and Ti.

Elements	C	O	Ti
Peak area (%)	37.12 %	44.69 %	18.19 %