

Cite this: DOI: 10.1039/c0xx00000x

www.rsc.org/xxxxxx

ARTICLE TYPE

Supplementary Information

Evidence for oxygen reduction reaction activity of a Ni(OH)₂/graphene oxide catalyst

⁵ Elaheh Farjami,*^a Michael A. Rottmayer^b, and L. Jay Deiner^a

^a Department of Chemistry, New York City College of Technology, City University of New York, 300 Jay Street, Brooklyn, NY USA. Fax: 01 718 260 5198; Tel: 01 718 260 5850; E-mail: efarjami@citytech.cuny.edu

¹⁰ ^b Air Force Research Laboratory, Wright Patterson Air Force Base, OH 45433, USA

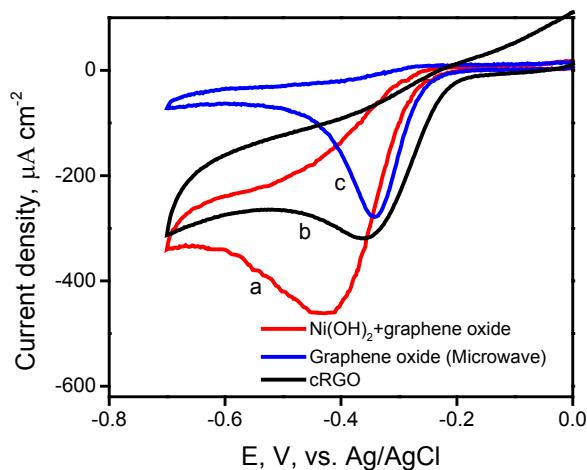


Figure S1. Cyclic voltammograms of (a) a physical mixture of Ni(OH)₂ particles with graphene oxide, (b) chemically reduced graphene oxide (cRGO), and (c) microwave treated graphene oxide on glassy carbon electrodes in O₂-saturated 0.5 M NaOH (scan rate 100 mV s⁻¹, scan direction from -0.1 V to -0.7 V vs. Ag/AgCl).

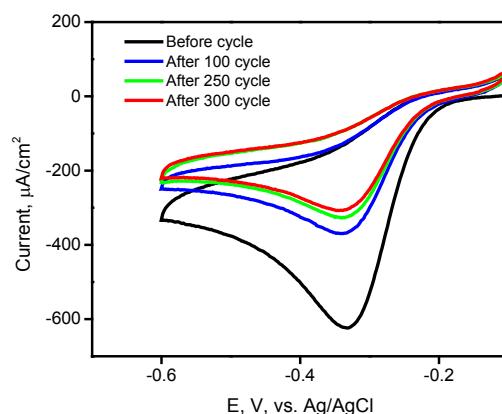
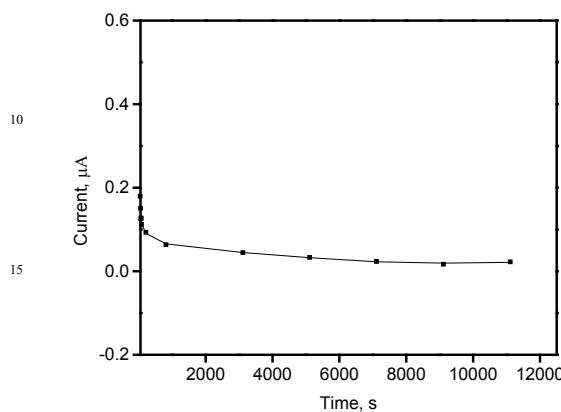


Figure S2. Sequential oxygen reduction cyclic voltammetry curves for the $\text{Ni}(\text{OH})_2/\text{graphene oxide}$ hybrid catalyst in oxygen saturated 0.5M NaOH solution at potential scan rate of 50 mVs^{-1} .

5



20

