Supporting Information

Active $LaNi_{1-x}Fe_xO_3$ Bifunctional Catalysts for Air Cathodes in Alkaline Media

A. N. Daiwei Zhang,[a,b,c] A. N. Yufeng Song,[a] A. N. Zhenzhen Du,[a] A. N. Long Wang,[b] A. N. Yutao Li,[b] A. N. John B. Goodenough*[b]

[a] School of Chemical Engineering, Hefei University of Technology, Hefei, 230009, P.R. China.
[b] Texas Materials Institute, The University of Texas at Austin, 1 University Station, C2201, Austin, Texas78712.
[c] CAS Key Laboratory of Materials for Energy Conversion, Hefei, 230026, P.R. China.
* Texas Materials Institute, Materials Science & Engineering Program, The University of Texas at Austin.

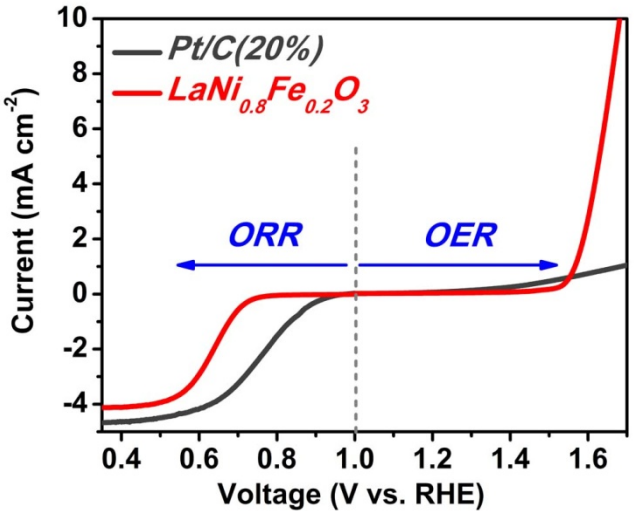

Fig. S1 Comparison of the ORR/OER polarization curves of $LaNi_{0.8}Fe_{0.2}O_3$ and commercial Pt/C (20%) on glass carbon rotating disk electrode in an O_2 saturated 1M KOH solution (conditions: temperature -- 25℃, sweep rate-- 5mV/s, rotation rate-- 1600rpm)

The electrocatalytic activity of $LaNi_{0.8}Fe_{0.2}O_3$ for ORR/OER was characterized by linear scanning voltammetry (LSV) in 1 M KOH on a glassy carbon electrode and compared with commercial Pt/C (20%) (Figure S1). Pt/C (20%) has higher ORR onset potential and diffusion-limiting current than $LaNi_{0.8}Fe_{0.2}O_3$, while

$LaNi_{0.8}Fe_{0.2}O_3$ exhibits much higher OER current density than Pt/C.