Supporting Information

NiCo$_2$O$_4$ nanoframes with nanosheet surface as efficient electrocatalysts for oxygen evolution reaction

Zhen Chen, a, b Bo Zhao, a Ya-Chuan He, a, b Hao-Ran Wen, a Xian-Zhu Fu,*, a, c Rong Sun,*, a Ching-Ping Wong d, e

a Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, Shenzhen 518055, China.
b Institute of Nano Science and Technology, University of Science and Technology of China, Suzhou 215123, China.
c College of Materials Science and Engineering, Shenzhen University, Shenzhen 518055, China.
d School of Materials Science and Engineering, Georgia Institute of Technology, Atlanta, GA 30332, United States.
e Department of Electronics Engineering, The Chinese University of Hong Kong, Hong Kong, China.

*Corresponding author:
Xian-Zhu Fu, E-mail address: xz.fu@szu.edu.cn;
Rong Sun, E-mail address: rong.sun@siat.ac.cn;
Tel: +86-755-86392151; Fax: +86-755-86392299
Scheme S1 Schematic representation of electrochemical characterization for OER.

Fig. S1 SEM images of Co$_3$O$_4$ nanoframe (a-b) and NiO nanoframe (c-d).
Fig. S2 N$_2$ adsorption-desorption isotherm (a) and corresponding pore size distribution (b) for Co$_3$O$_4$ nanoframe and NiO nanoframe.

Fig. S3 XRD pattern of Cu$_2$O nanoframe.

Fig. S4 LSV curves of Co$_3$O$_4$ nanoframe (a) and NiO nanoframe (b) before and after 10 h of stability tests in 1 M KOH.
Fig. S5 Cyclic voltammetry curves of NiCo$_2$O$_4$ nanoframes before and after 50 CV cycles at a scan rate of 20 mV s$^{-1}$ in 1 M KOH.