**Supplementary information**

Enhanced electrocatalytic hydrogen evolution activity of nickel foam by low-temperature-oxidation

Binhong He,a,b Yafei Kuang a[[1]](#footnote-1)\* Zhaohui Hou,b Minjie Zhou,b[[2]](#footnote-2)\* and Xiaobo Chenc\*

a. College of Chemistry and Chemical Engineering, Hunan University, Changsha 410082, P. R. China, E-mail: yafeik@163.com

b. School of Chemistry and Chemical Engineering, Hunan Institute of Science and Technology, Yueyang 414006, P. R. China, E-mail: zmj0104@126.com

c. Department of Chemistry, University of Missouri – Kansas City, Kansas City, MO 64110, USA, E-mail: chenxiaobo@umkc.edu



**Fig. S1** SEM image of naked Ni foam.



**FiG. S2** XRD pattern of pure NiO.



**FiG. S3** The *i-t* curve of 3D NiO/NF (-70 mV vs. RHE) (a) and the *v-t* curve of 3D NiO/NF (-10 mA cm-2) (b).



**FiG. S4** Cyclic voltammograms of the NF recorded at pH=14 and between -0.05 V and +0.05 V vs. Ag/AgCl at a scan rate of 50 mV s-1

1. [↑](#footnote-ref-1)
2. *\*Corresponding author.*

*E-mail:* *yafeik@163.com**;**zmj0104@126.com;**chenxiaobo@umkc.edu*

*Tel: +86-730-8640122;*

*Fax: +86-730-8640122* [↑](#footnote-ref-2)