Supplementary Information

The (NiFe)₉S₈ nanorods array as negative electrode for high-

performance hybrid supercapacitor

Fengming Zhou^a, Xiaodong Wang^a, Zheng Lv^{ab}, Xiaoyu Li^{ab}, Qi Zhang^a, Zhenjiang Li^a, Yujing Zhu^{c*}, Zhenyu Xiao^{a*}, Lei Wang^{ab}

a. International Cooperation United Laboratory of Eco-chemical Engineering and Green Manufacturing, College of Chemistry and Molecular Engineering, Qingdao University of Science and Technology, Qingdao 266042, P. R. China. E-mail: inorgxiaozhenyu@163.com; inorchemwl@126.com

b. Technology Innovation Center of Battery Safety and Energy Storage Technology, Qingdao, International Science and Technology Cooperation Base of Qingdao, College of Environment and Safety Engineering, Qingdao University of Science and Technology, Qingdao 266042, P. R. China.

c. School of Materials Science and Engineering, Liaocheng University, Liaocheng 252059, P. R. China

Figure



Figure S1. SEM of NF-3.



Figure S2. XRD of NF-3.



Figure S3. SEM of NFS-0 (a) and NFS-10 (b).



Figure S4. The full spectrum XPS spectra of the NFS-3.



Figure S5. CV curve of (a) NFS-0; (b) NFS-1; (c) NFS-5; (d) NFS-7; (e) NFS-9: (f)

NFS-10.



Figure S6. GCD curve of (a) NFS-0; (b) NFS-1; (c) NFS-5; (d) NFS-7; (e) NFS-9: (f)

NFS-10.



Figure S7. EIS of NFS-0, NFS-3 and NFS-10.



Figure S8. CV curve of (a) NFS-3-140; (b) NFS-3-180; (c) NFS-3-200; and GCD

curve of (d) NFS-3-140; (e) NFS-3-180: (f) NFS-3-200.