

## *Supporting Information*

### **NiSe<sub>2</sub> nanooctahedra as anodes for high performance sodium-ion batteries**

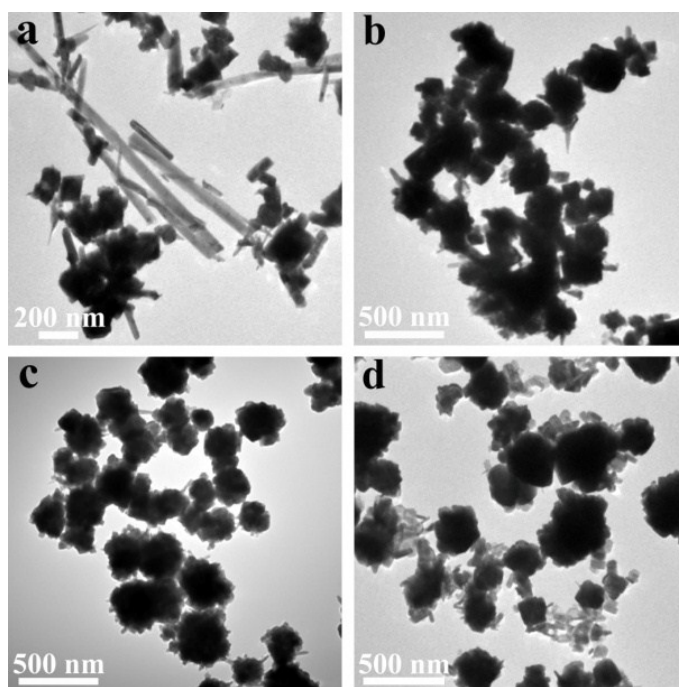
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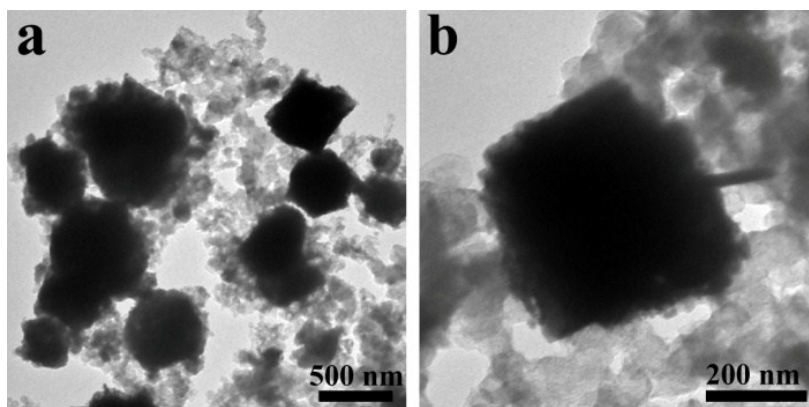
(Shandong Academy of Sciences), Jinan 250353, China

<sup>b</sup> Energy Research Institute of Shandong Academy Science, Qilu University of

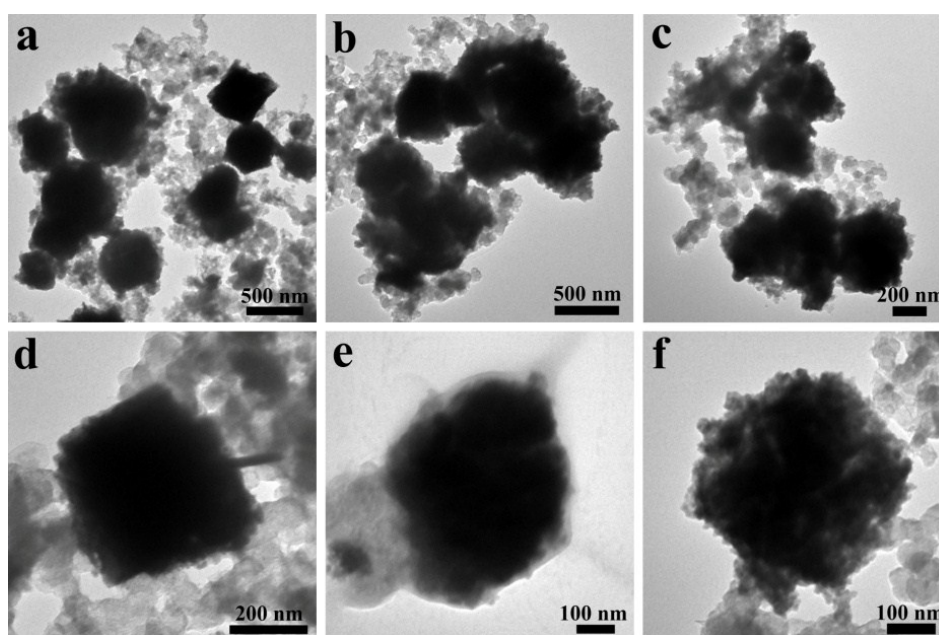
Technology (Shandong Academy of Science), Jinan 250353, China



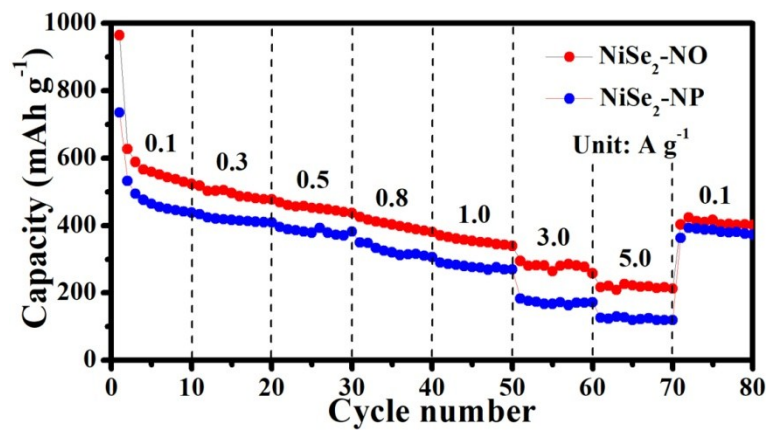
**Figure S1.** TEM images of NiSe<sub>2</sub>-NP under different NaOH concentration: (a) 1 M, (b) 2 M, (c) 4 M, (d) 6 M.



**Figure S2.** The TEM images of NiSe<sub>2</sub>-NO after first tens cycles.



**Figure S3.** The TEM images of NiSe<sub>2</sub>-NO after 10 cycles (a, d), 100 cycles (b, e),  
500 cycles (c, f).



**Figure S4.** The rate capability of NiSe<sub>2</sub>-NO and NiSe<sub>2</sub>-NP.