

# One-pot Synthesis of NiSe<sub>2</sub> with layered Structure for Nickel-Zinc battery

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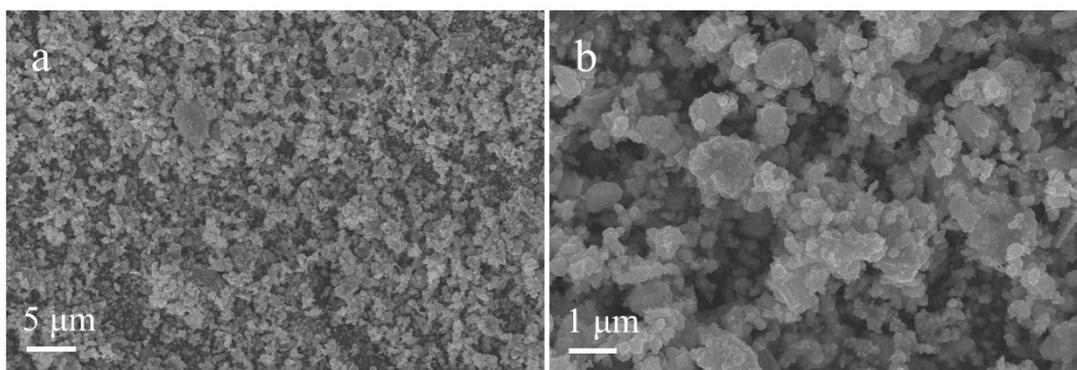


Figure S1 SEM images of the NiSe<sub>2</sub>-2 sample (a) at low magnification, (b) at high magnification.

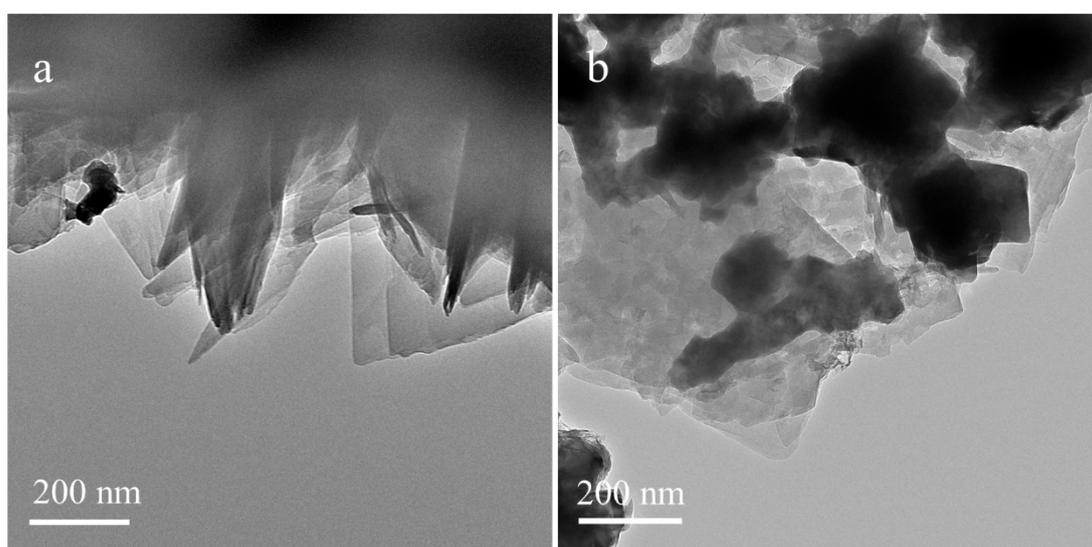


Figure S2 TEM image of (a) Ni-MOFs sample and (b) NiSe<sub>2</sub>-1 sample.

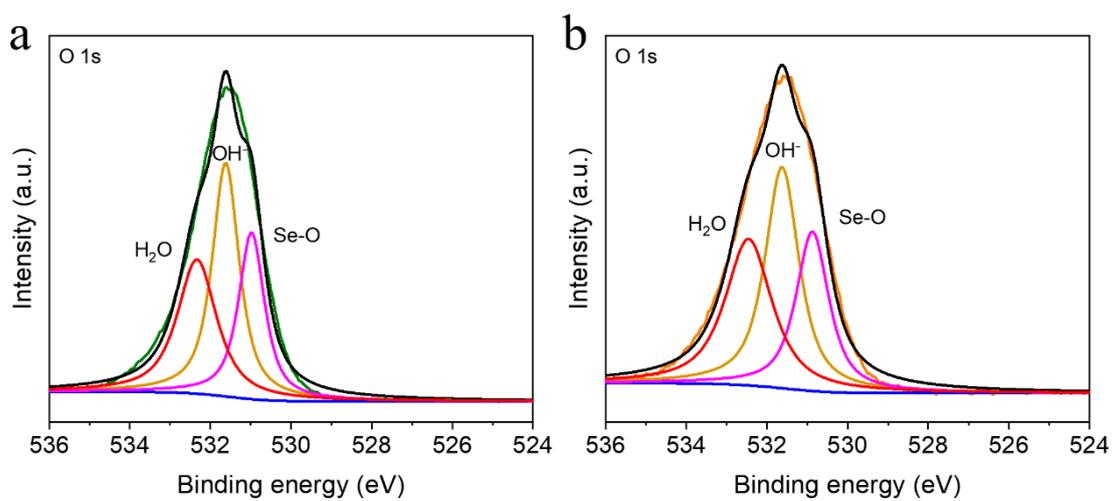


Figure S3 High resolution O 1s XPS spectra of (a) Ni-MOFs and (b) NiSe<sub>2</sub>-1.

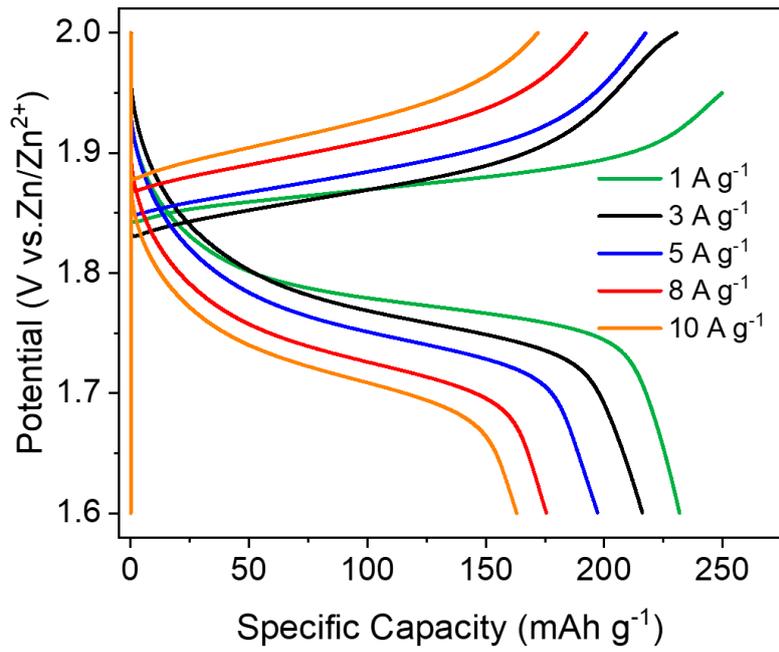


Figure S4 GCD curves of NiSe<sub>2</sub>-1 at different current densities.

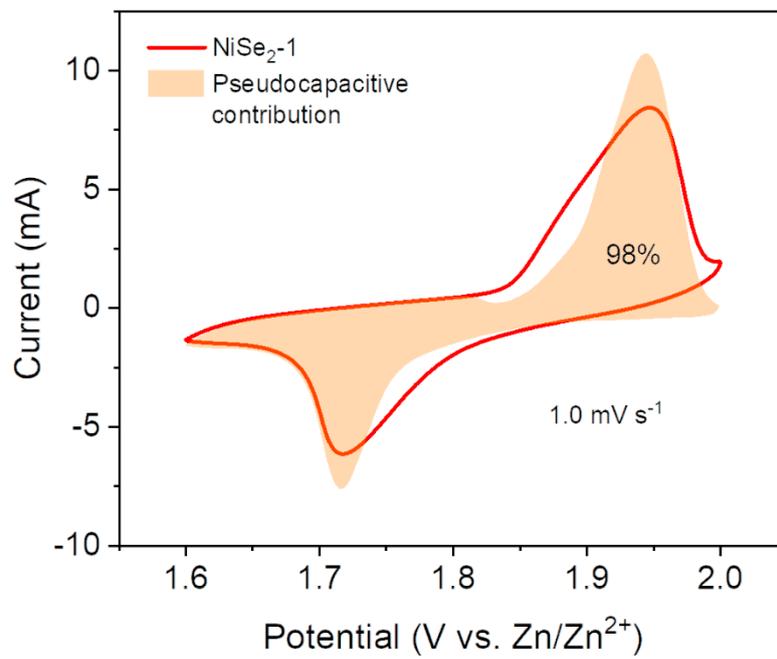


Figure S5 Ratio of pseudo-capacitive capacity for NiSe<sub>2</sub>-1 at 1 mV s<sup>-1</sup>.

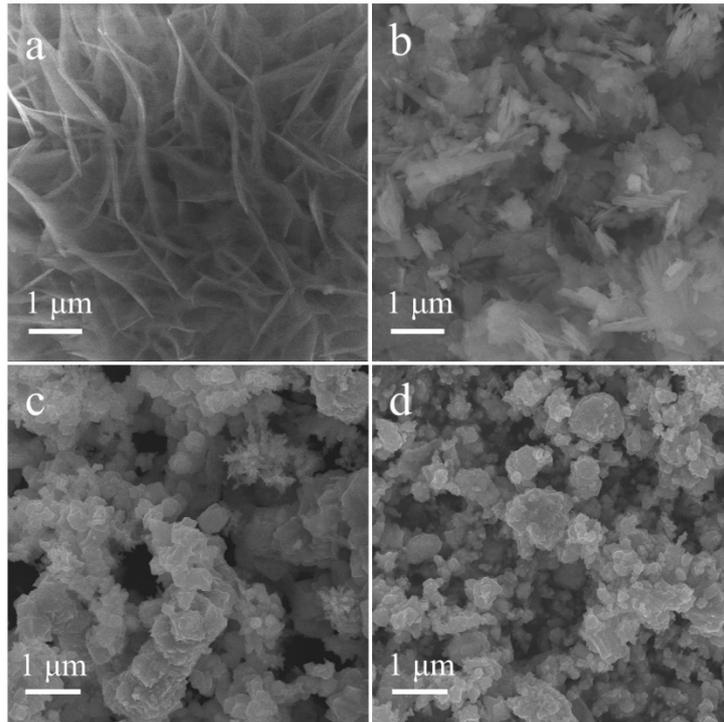


Figure S6 SEM images of (a) Ni-MOFs, (b) NiSe<sub>2</sub>-0.5, (c) NiSe<sub>2</sub>-1 and (d) NiSe<sub>2</sub>-2 samples.

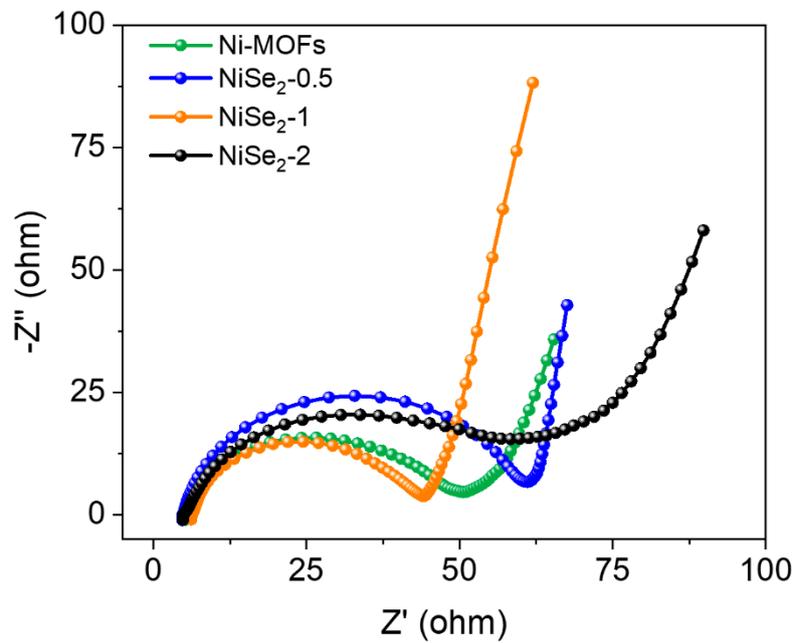


Figure S7 Nyquist plots of Ni-MOFs and NiSe<sub>2</sub>-X (X=0.5,1,2).