

## Supporting Information

### Synthesis of NiSe Nanorod Array Structure as a Binder-Free Cathode for an Aqueous Rechargeable Ni-Zn Battery

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Figure S1 Schematic of the synthesis process of different samples.

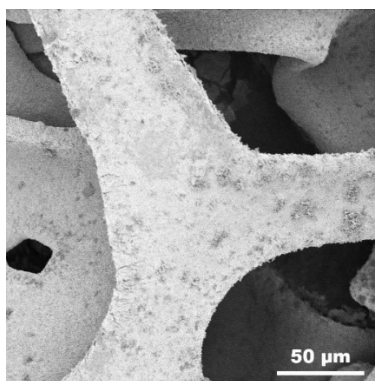


Figure S2 SEM image of nickel foam.

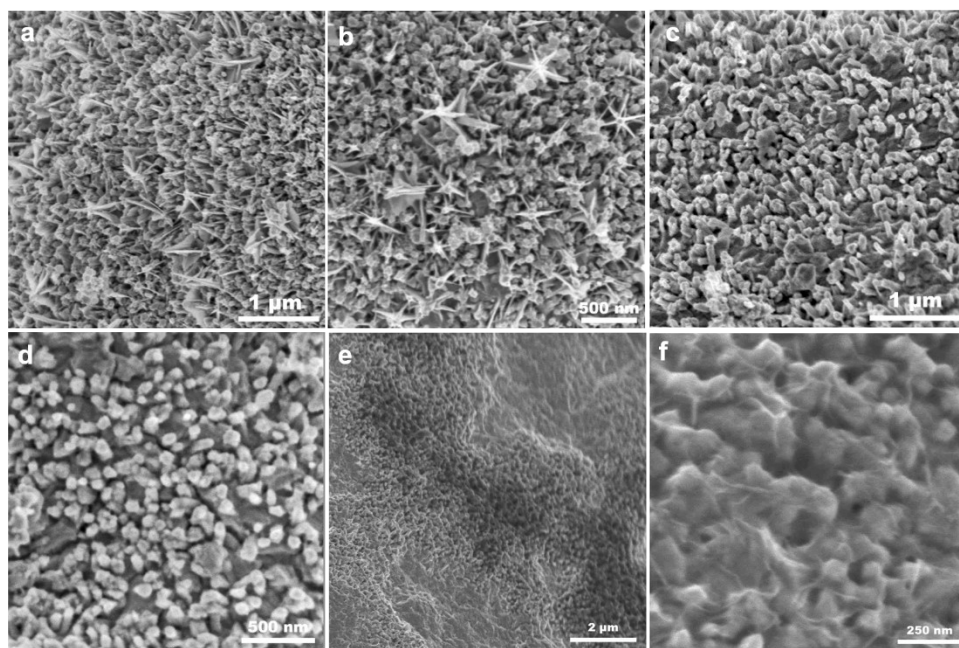


Figure S3 SEM images of different samples: (a, b) OS, (c, d) TS, and (e, f) TSH.

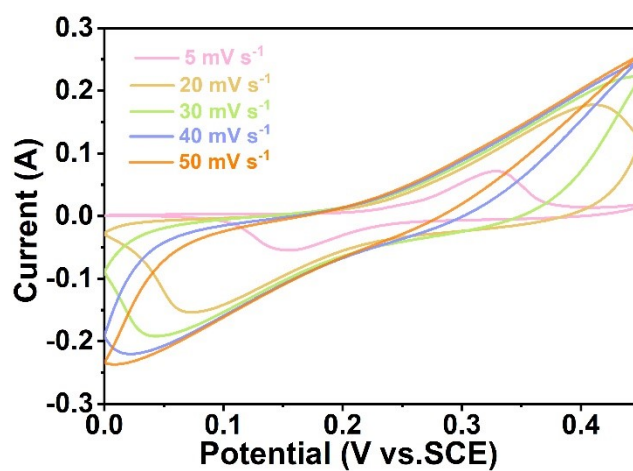


Figure S4 CV curves of CTSH electrode at different scan rates of 5–50  $\text{mV s}^{-1}$ .

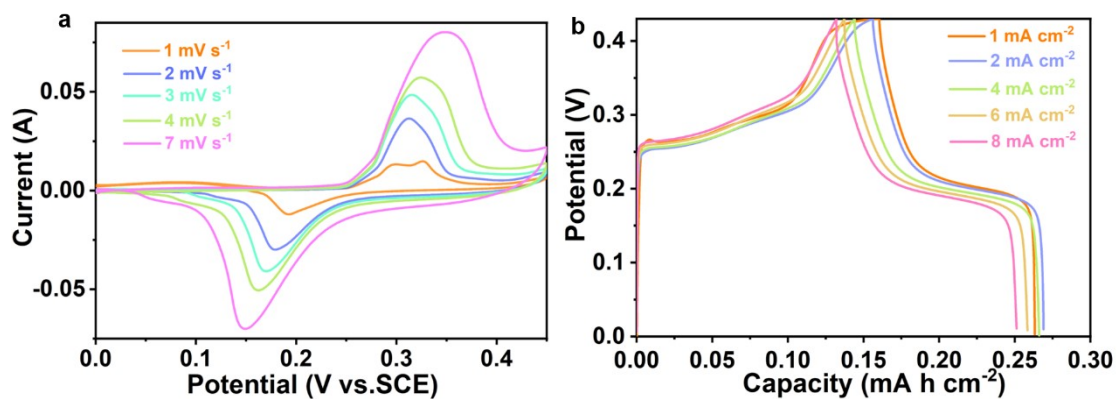


Figure S5 CV and GCD curves of OS electrode at different current densities.

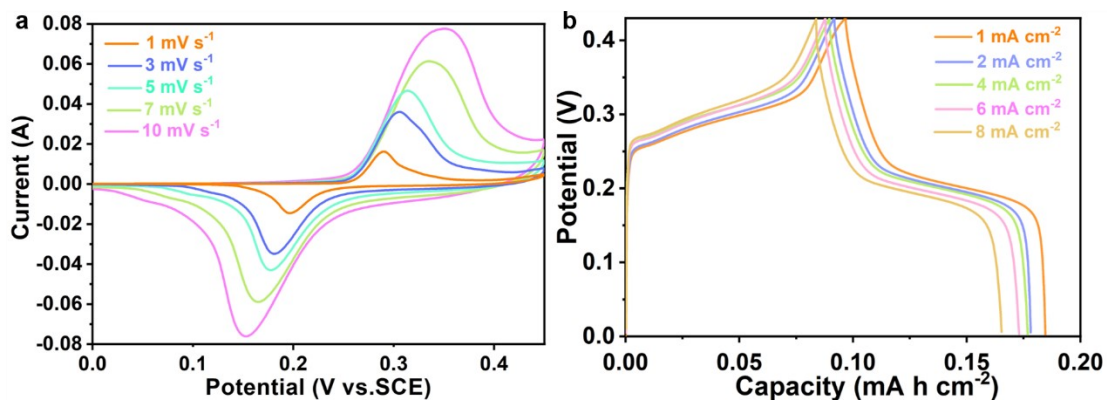


Figure S6 CV and GCD curves of TS electrode at different current densities.

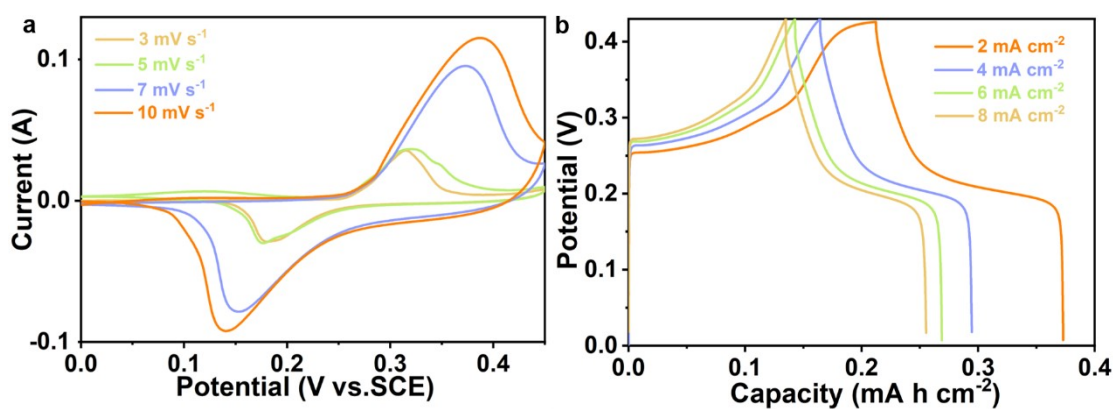


Figure S7 CV and GCD curves of TSH electrode at different current densities.

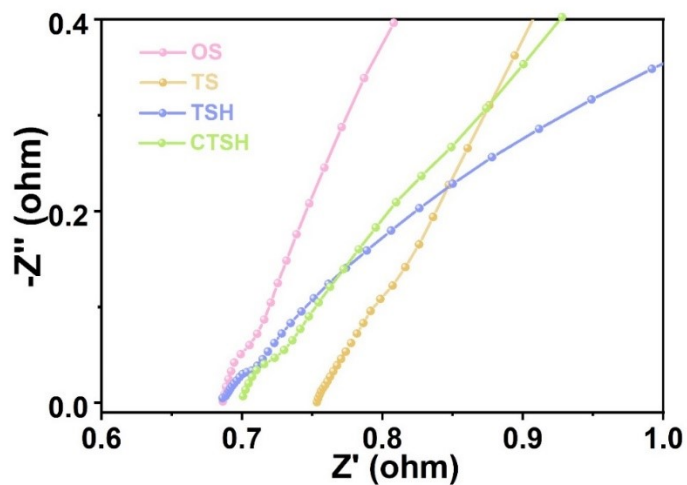


Figure S8 The enlargement of EIS measurement.