Supporting information

Rational Design of Self-supported Ni₃S₂ Nanoparticles as a Battery

Type Electrode Material for High-Voltage (1.8 V) Symmetric

Supercapacitor Applications

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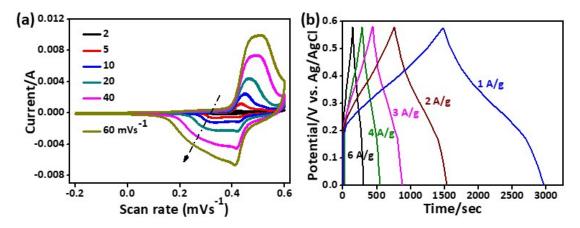


Figure S1. A separate graph of CV and GCD curves at the potential window of 0.0 to 0.6 V.

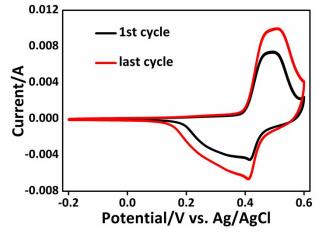


Figure S2. CV curves of the first and last cycle.

The GCD curve at 0.5 A g^{-1} is shown in **Fig. S3**. As seen, the voltage cut-off is limited to only 1.6 V (compared to 5 A g^{-1} , and even other higher current densities are given in **Fig. 5**). The short discharge time is another drawback of taking such a low current density for GCD measurements. Hence, we optimized and then selected that at the current of 5 A g^{-1} , the best performance in terms of (potential window and discharge time) is achieved for the active electrode material. This signifies that5 A g^{-1} is the suitable and optimized current density for this work.

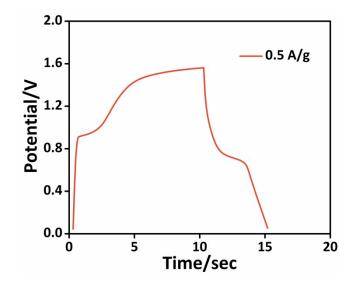


Figure S3. GCD curve at 0.5 A/g.