

$\text{Na}_3\text{SbSe}_{4-x}\text{S}_x$ as Sodium Superionic Conductors

Supplementary information

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Figure S1. SEM images and EDX spectroscopy elemental mappings of (a) S1, (b) S2, (c) S3, and (d) S4 in the $\text{Na}_3\text{SbSe}_{4-x}\text{S}_x$ system (corresponding to $x = 1, 2, 3$ and 4).

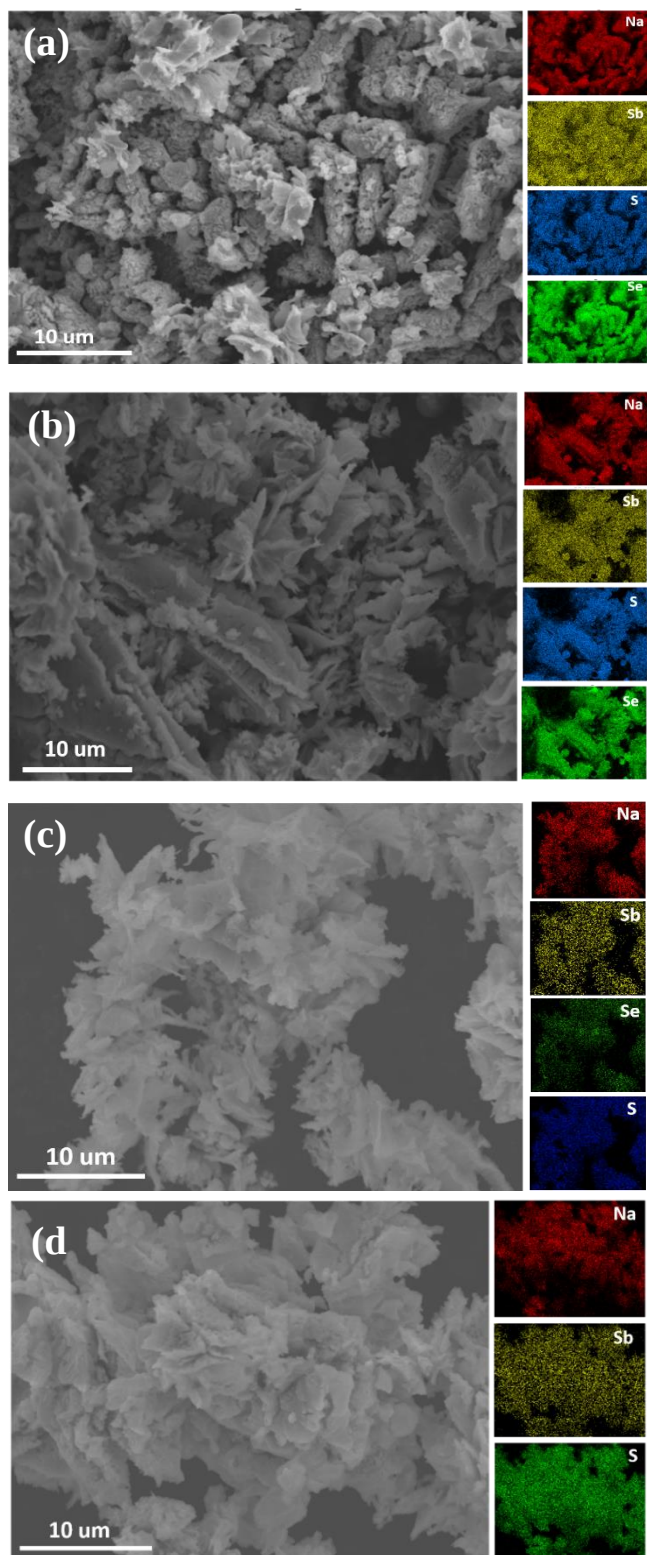


Figure S2. Nyquist impedance plot of Na_3SbSe_4 at from 30°C to 100°C.

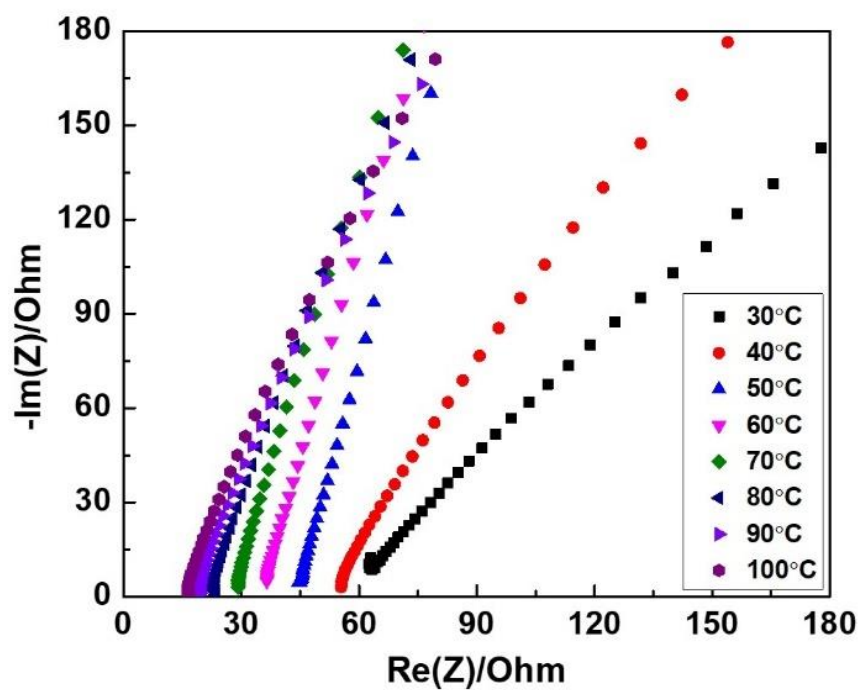


Figure S3. XRD patterns of Na_3SbSe_4 before and after CV measurements.

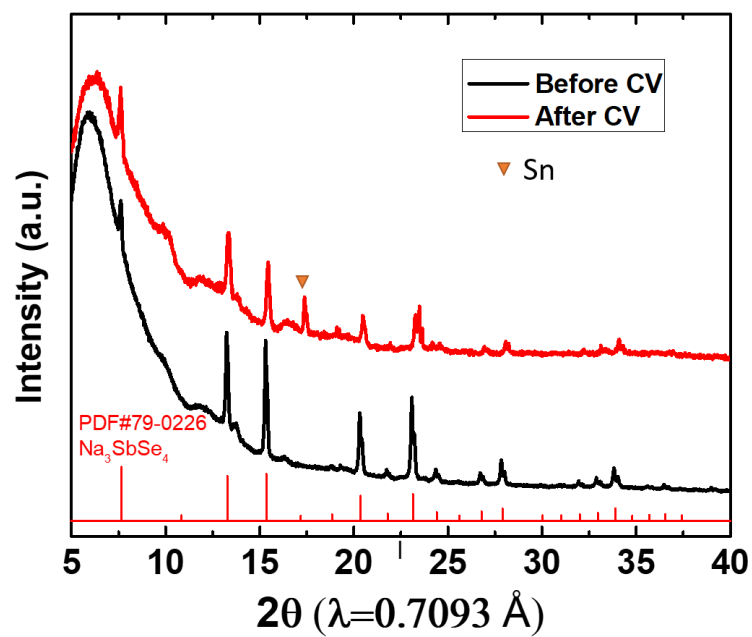


Table S1. Ionic conductivity at 30°C and activation energy of the synthesized compounds in the $\text{Na}_3\text{SbSe}_{4-x}\text{S}_x$ system.

Compound	Ionic conductivity at 30°C (mS cm ⁻¹)	Activation Energy (eV)
S0 (x=0)	0.85	0.193
S1 (x=1)	0.45	0.193
S2 (x=2)	0.32	0.194
S3 (x=3)	0.64	0.207
S4 (x=4)	0.69	0.213