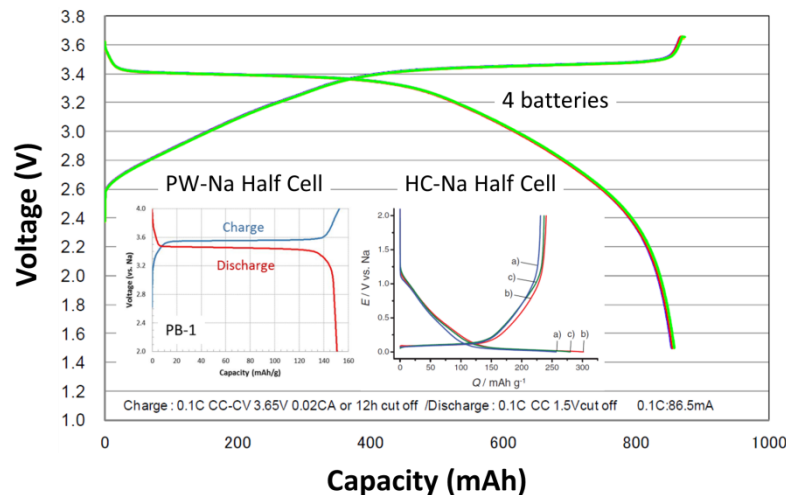
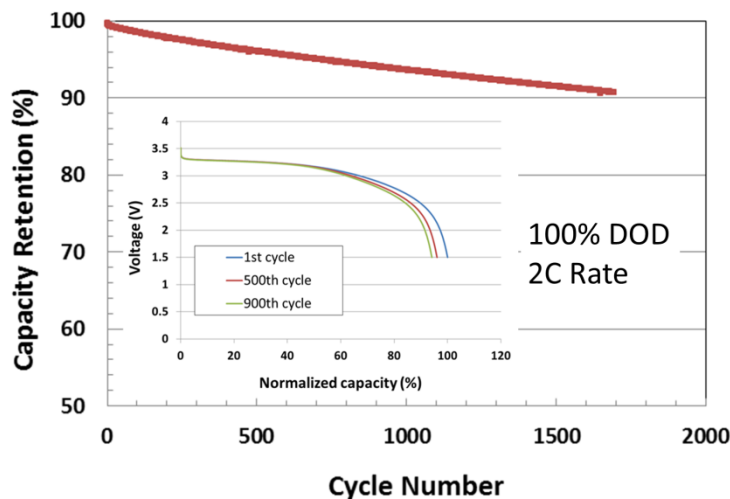


High Performance Sodium Ion Battery with Prussian White Cathode

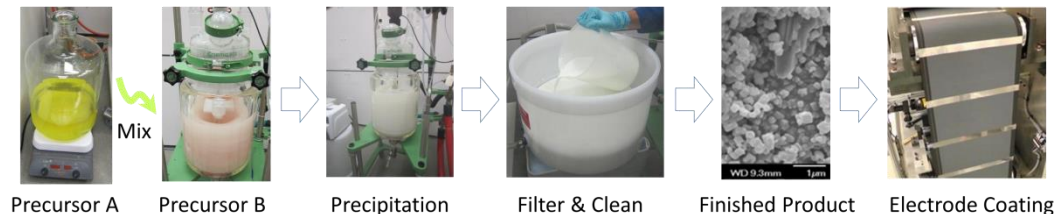
Prussian White – Hard Carbon Battery



Long Cycle Life



Low Cost Synthesis (low temperature co-precipitation process)



Nail Penetration



- Fully charged 1 Ah pouch cell.
- After nail penetration, battery temperature raised to 100 °C, but **no smoke, fire or explosion**.
- Second penetration was performed, only little swelling for the cell.

Overcharge Experiment



- 1Ah cell was fully charged.
- Overcharge (1.5x) was applied at 1C rate for 1.5h.
- Cell swelled during overcharge, but **no smoke, fire or explosion**.
- Temperature was increased to 90 °C: voltage dropped to 0V after 1h