

Supplementary Information

Selenium/interconnected porous hollow carbon bubbles Composites as the cathodes of Li-Se batteries with high performance

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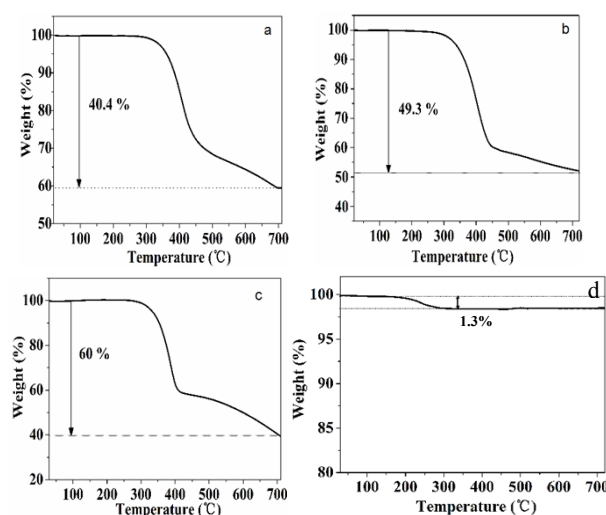


Figure S1 Thermogravimetric (TGA) curve of (a) Se₄₀/PHCBs, (b) Se₅₀/PHCBs (c), Se₆₀/PHCBs and (d) PHCBs in argon.

Table 1 Textural parameters of PHCBs and carbon-selenium composites.

Material	BET surface area (m ² g ⁻¹)	Pore volume (cm ³ g ⁻¹)	Pore Size (nm)
PHCBs	253.3	0.76	5.4
Se:C = 2:3	204.0	0.37	6.1
Se:C = 1:1	53.6	0.36	7.1
Se:C = 3:2	39.9	0.17	11.2

Figure S2 SEM and TEM images of Se₄₀/PHCBs (a and c) and Se₆₀/PHCBs (b and d).

Figure S3 EDX spectrum of Se₅₀/PHCBs.

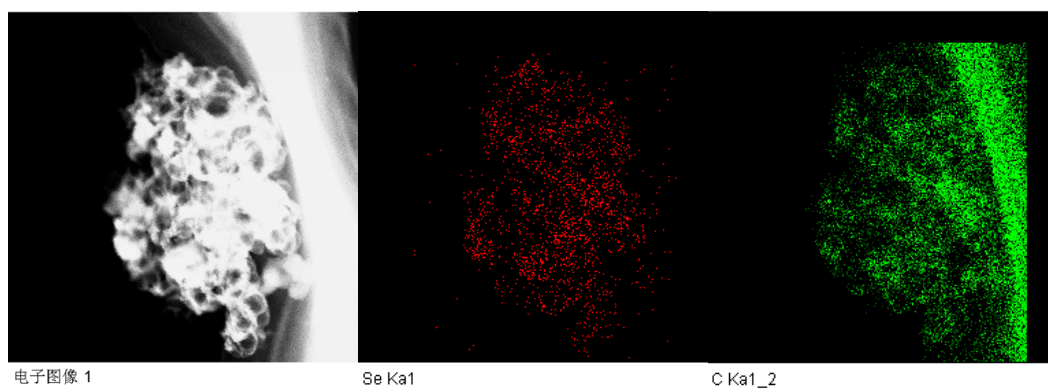


Figure S4 EDS elemental mapping images of selenium and carbon in $\text{Se}_{50}/\text{PHCBs}$ composite.

a

b

Figure S5 Coulombic efficiency of (a) $\text{Se}_{40}/\text{PHCBs}$ and (b) $\text{Se}_{60}/\text{PHCBs}$.

Figure S6 SEM image of Se/PHCBs composite with ~50 wt.% selenium after 100 cycles at 0.1 C.