

## Supporting Information

### Synthesis of Se-HPCF composite via a liquid-solution route and its stable cycling performance in Li-Se batteries

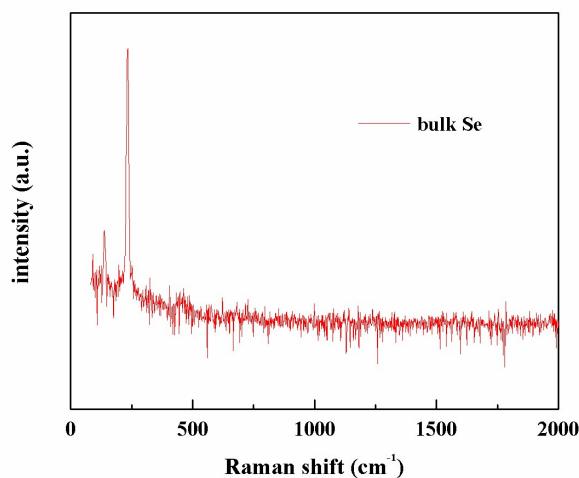
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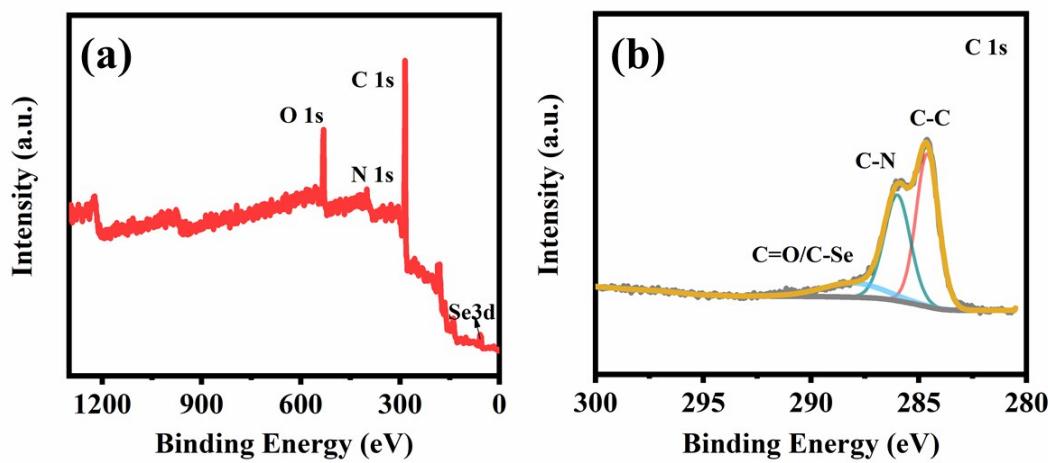
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**Fig. S1** Raman spectrum of Se crystals.



**Fig. S2** High resolution XPS spectra of (a) Survey, (b) C 1s for Se-HPCF composite.

**Table S1** Electrochemical performance comparison of Se-C composites reported in the literatures with present work.

Electrode Materials	Current density	Cycling capacity (mAh g <sup>-1</sup> )	Cycle numbers(n)	Rate capability (mAh g <sup>-1</sup> )	Ref.
Se/porous carbon nanofibers	0.74 C	516	900	637/0.147 C	[S1]
				306/5.9 C	
Se/CMCs	0.2 C	425.2	100	218.1/5 C	[S2]
	2C	166.3	460		
Se/CNSs	0.1C	600	100	700/0.1 C	[S3]
	0.5C	376	1000	~390/10 C	
Se/N-CSHPC-II	0.2 C	555	150	438/1 C	[S4]
	0.5 C	462	200		
Se/C/aniline	134 mA g <sup>-1</sup>	462	200	600/67.2 mA g <sup>-1</sup>	[S5]
				319/1.34 A g <sup>-1</sup>	
Se/CNTs	5C	390	500	592/0.5C	[S6]
				390/5 C	
Se/PBC	0.2 C	509	200	518/0.2C	[S7]
	0.5C	376	500	323/5 C	
Se-HPCF	0.2 C	533	50	659/0.2C	This work
	5C	202	2000	351/5 C	

## References

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