

Supporting Information

Table S1 Comparison of the high rate performance of the SnO₂ in this work with those that have been reported in the literatures

Samples	Synthetic Method	Potential range (V vs. Li/Li ⁺)	High rate	Capacity (mAh/g)	Reference
SnO ₂ nanoparticles	Molten salt	1.5-0.05	1C 5C 10C	about 520 about 400 about 300	This work
SnO ₂ nanowire	SBA-15 template	1.2-0	3C 5C 10C	700 about 500 about 200	[15]
Mesoporous SnO ₂	KIT-6 template		3C 5C 10C	760 740 730	
Li ₂ O-CuO-SnO ₂	Electrostatic spray deposition		1.5-0	1C 5C 8C	
Ni ₃ Sn ₄	Electrodeposition on Cu nanorods	1.5-0.02	0.8C 5C 10C	about 500 about 250 about 180	[9]

In table S1, we list the reported high rates performances of tin based anode materials. The present results are comparable. Considering molten salt method is template or surfactant free, the synthetic process is easiest to achieve and scale-up, it is promising for large scale application.

References

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- 9 J. Hassoun, S. Panero, P. Simon, P.-L. Taberna and B. Scrosati, *Adv. Mater.*, 2007, **19**, 1632.