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# Porous $\text{TiNb}_2\text{O}_7$ Nanospheres as ultra Long-life and High-power Anodes for Lithium-ion Batteries

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## Graphical abstract

## Highlights

- Porous  $\text{TiNb}_2\text{O}_7$  nanospheres have been fabricated with the assistance of block copolymer P123.
- • The as-prepared  $\text{TiNb}_2\text{O}_7$  anodes present a reversible capacity of 160 mA h/g after 10000 cycles at 5 C with a capacity loss of only 0.0033% per cycle.
- • The  $\text{TiNb}_2\text{O}_7$  anodes show good rate performance of 167 mA h/g at 50 C.
- • The  $\text{TiNb}_2\text{O}_7$  materials maintain the morphology of nanospheres and the porous structure even after 10000 cycles.

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