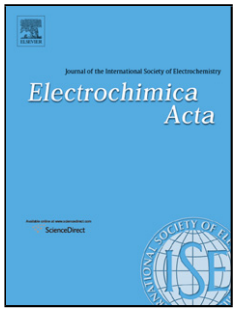

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Porous $TiNb_2O_7$ Nanospheres as ultra Long-life and High-power Anodes for Lithium-ion Batteries

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Graphical abstract

Highlights

- Porous $TiNb_2O_7$ nanospheres have been fabricated with the assistance of block copolymer P123.
- · The as-prepared $TiNb_2O_7$ 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 $TiNb_2O_7$ anodes show good rate performance of 167 mA h/g at 50 C.
- · The $TiNb_2O_7$ materials maintain the morphology of nanospheres and the porous structure even after 10000 cycles.