

## Supporting Information

### **High rate capability performance of ordered mesoporous TiNb<sub>6</sub>O<sub>17</sub> microspheres anodes for lithium ion batteries**

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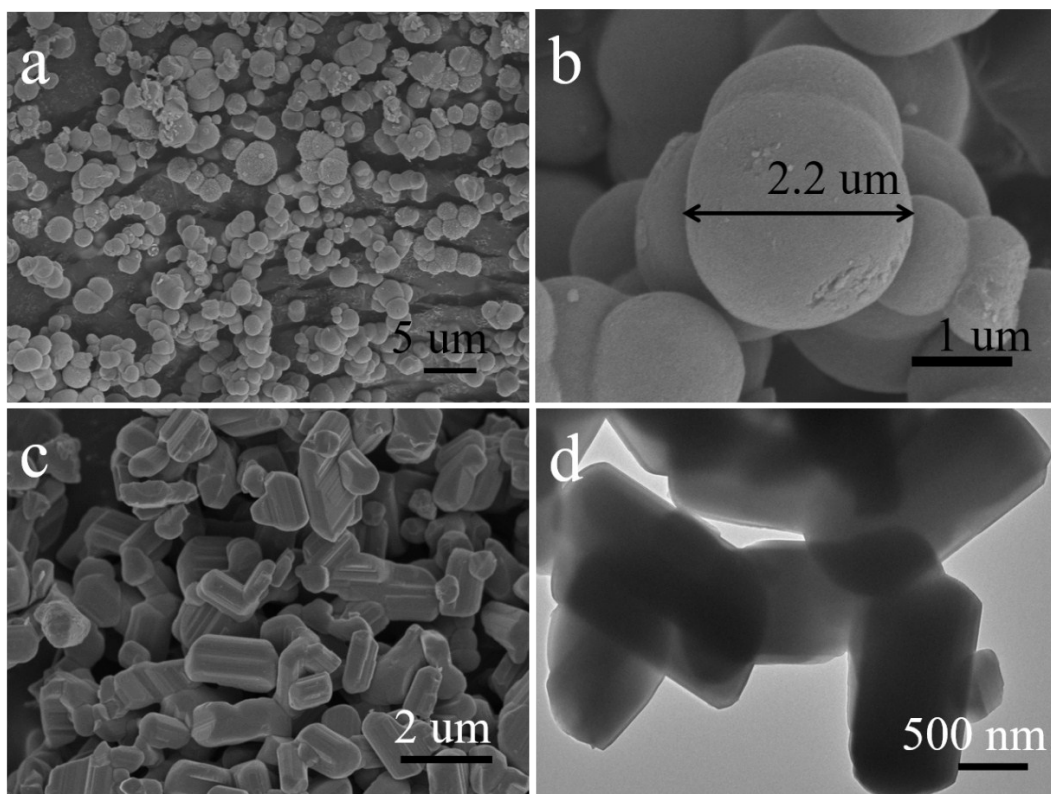
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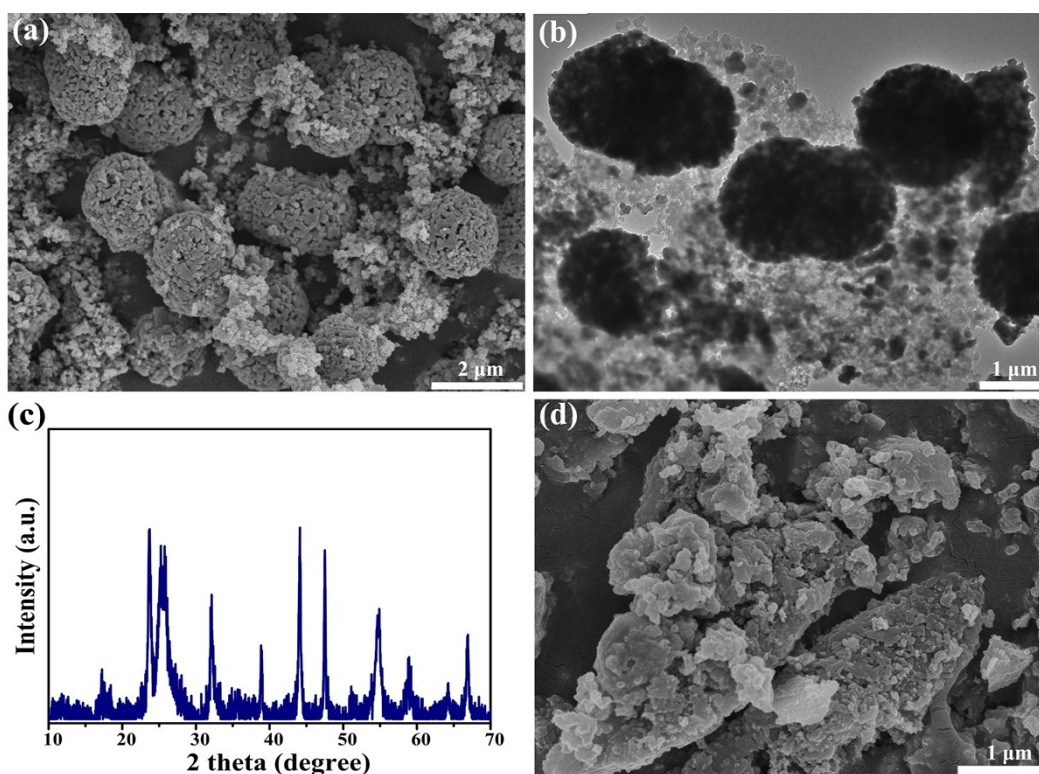
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**Figure S1** (a, b) FESEM images of precursor M-TNO materials; (c) FESEM image of B-TNO materials; (d) TEM image of B-TNO materials.



**Figure S2** (a) FESEM image, (b) TEM image, and (c) XRD pattern of mesoporous TiNb<sub>6</sub>O<sub>17</sub> after cycling for 500 cycles at 10 C; (d) FESEM image of bulk TiNb<sub>6</sub>O<sub>17</sub> after cycling for 500 cycles at 10 C.

**Table S1.** Electrochemical performance comparison of this work and previous reports of  $\text{TiNb}_6\text{O}_{17}$  anodes in Li-ion batteries.

Sample	Method	Performance	Ref.
Mesoporous $\text{TiNb}_6\text{O}_{17}$	Solvothermal, calcination	10 C, 500 cycles, 155.1 mA h g <sup>-1</sup>	<b><i>This work</i></b>
bulk $\text{TiNb}_6\text{O}_{17}$	Solid-state method	5 C, 100 cycles, 171 mA h g <sup>-1</sup>	<b><i>Chem. Commun.</i></b> <sup>1</sup>
$\text{TiNb}_6\text{O}_{17}/\text{C}$	Solid-state method	10 C, 500 cycles, 165.1 mA h g <sup>-1</sup>	<b><i>Ceram. Int.</i></b> <sup>2</sup>

#### References

1. C. Lin, G. Wang, S. Lin, J. Li, L. Lu,  $\text{TiNb}_6\text{O}_{17}$ : a new electrode material for lithium-ion batteries, *Chem. Commun.*, 2015, **51**, 8970.
2. W. Mao, K. Bao, L. Wang, G. Liu, H. Xie, R. Zhang, S. Zheng, J. Guo, B. Li, W. Wang, Synthesis of  $\text{TiNb}_6\text{O}_{17}/\text{C}$  composite with enhanced rate capability for lithium ion batteries, *Ceram. Int.*, 2016, **42**, 16935.