

## Electronic Supplementary Information

### **Topochemical synthesis of Bi<sub>2</sub>O<sub>3</sub> microribbons and their application in lithium-ion batteries†**

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### **Figure captions**

**Fig. S1** The FESEM images of  $\text{Bi}(\text{C}_2\text{O}_4)\text{OH}$  at different reaction time. (a) 4 h; (b) 6 h and (c) 10 h.

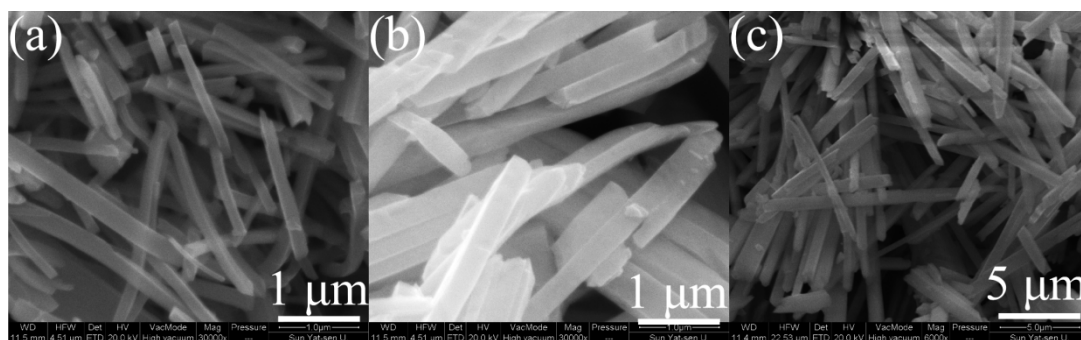
**Fig. S2** Comparison of the crystal structures of  $\text{Bi}(\text{C}_2\text{O}_4)\text{OH}$  and  $\text{Bi}_2\text{O}_3$  at different view a, b, and c axis, respectively.

**Fig. S3.** The FESEM images of as-made A- $\text{Bi}_2\text{O}_3$  after the thermal decomposition at 400 °C for 1 h.

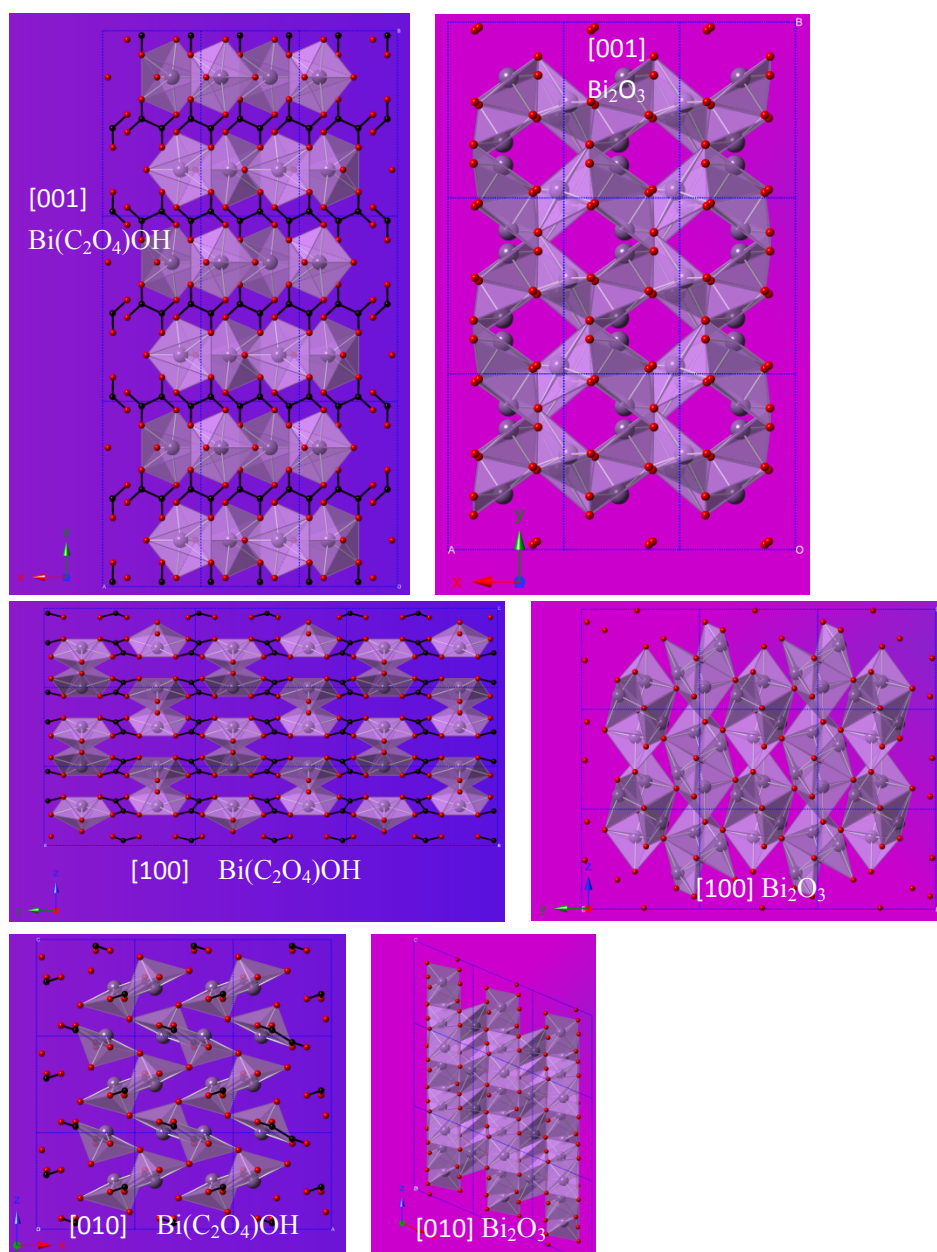
**Fig. S4.** EDX spectra of A- $\text{Bi}_2\text{O}_3$  microribbons. The elemental composition for A- $\text{Bi}_2\text{O}_3$  microribbons with atomic and weight percentage has been given in the inset table.

### **Table Captions**

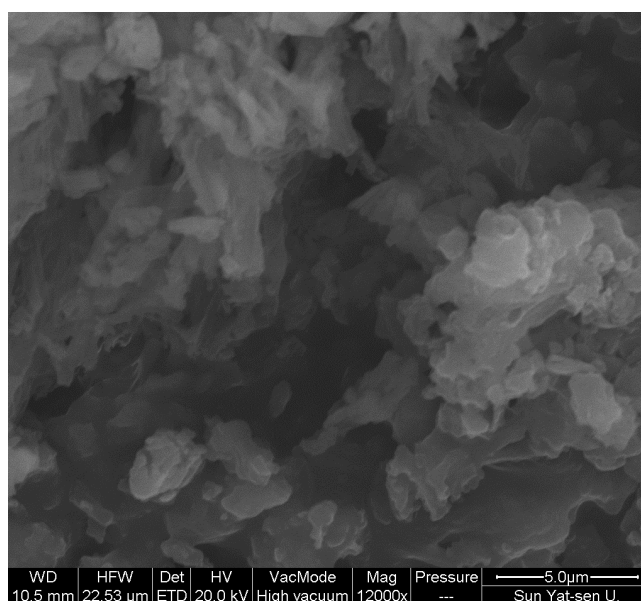
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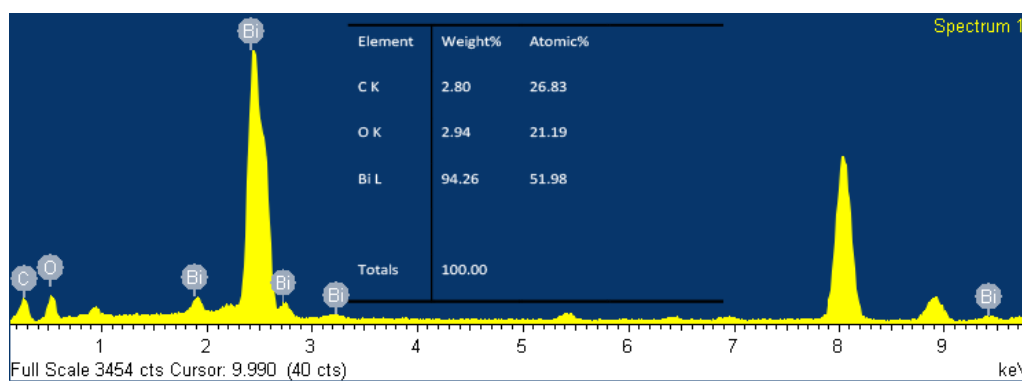
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**Fig. S4.** EDX spectra of A-Bi<sub>2</sub>O<sub>3</sub> microribbons. The elemental composition for A-Bi<sub>2</sub>O<sub>3</sub> microribbons with atomic and weight percentage has been given in the inset table.

**Tab. 1** The comparison of crystal structures of Bi(C<sub>2</sub>O<sub>4</sub>)OH and Bi<sub>2</sub>O<sub>3</sub>.

Unit cells parameters	Space-group	a (Å)	b (Å)	c (Å)	V (Å <sup>3</sup> )
Bi(C <sub>2</sub> O <sub>4</sub> )OH	<i>Pnma</i> (62)-orthorhombic	6.0853(2)	11.4479(3)	5.9722(2)	416.05(2)
Bi <sub>2</sub> O <sub>3</sub>	<i>P121/c1</i> (14)-monoclinic	5.8496(3)	8.1648(4)	7.5101(4)	330.23(3)