

Supporting information for

## One-pot synthesis of carbon-coated VO<sub>2</sub>(B) nanobelts for high-rate lithium storage

Xianhong Rui,<sup>ab</sup> Daohao Sim,<sup>a</sup> Chen Xu,<sup>a</sup> Weiling Liu,<sup>a</sup> Huiteng Tan,<sup>a</sup> Kangming Wang,<sup>a</sup> Huey Hoon Hng,<sup>a</sup> Tuti Mariana Lim,<sup>\*bc</sup> and Qingyu Yan<sup>\*ade</sup>

<sup>a</sup>*School of Materials Science and Engineering, Nanyang Technological University, 639798, Singapore*

<sup>b</sup>*School of Civil and Environmental Engineering, Nanyang Technological University, 639798, Singapore*

<sup>c</sup>*School of Life Sciences and Chemical Technology, Ngee Ann Polytechnic, 599489, Singapore*

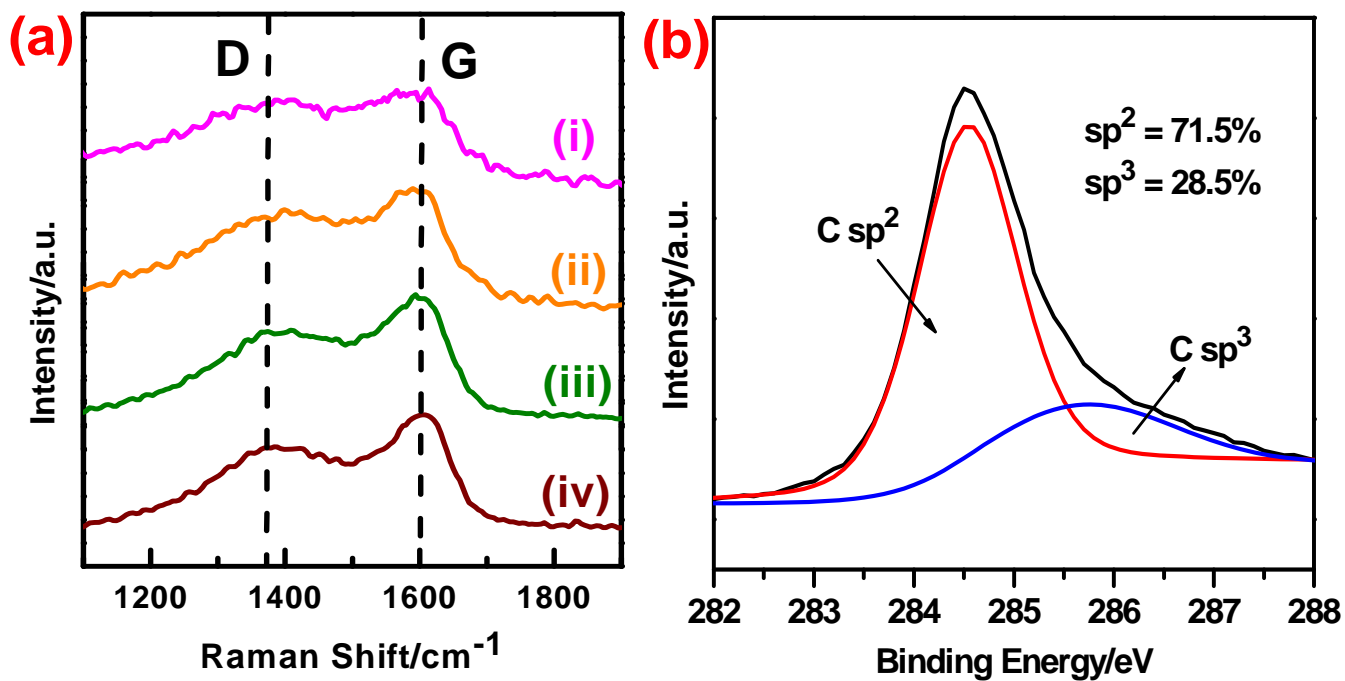
<sup>d</sup>*Energy Research Institute, Nanyang Technological University, 637459, Singapore*

<sup>e</sup>*TUM CREATE Centre for Electromobility, Nanyang Technological University, 637459, Singapore*

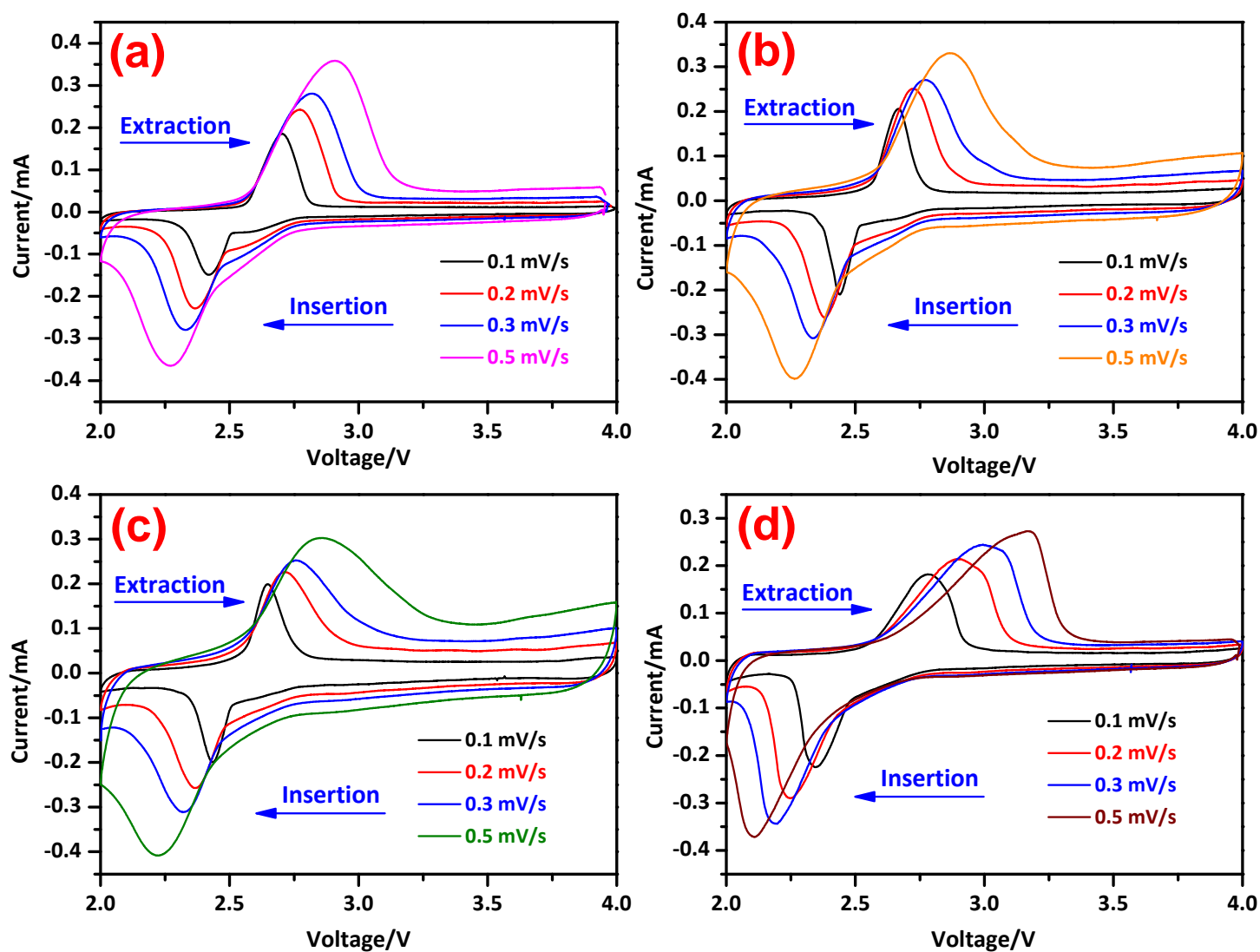
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\* **Corresponding author.** Tel: +65 6790 4583, Fax: +65 6790 9081

**E-mail addresses:** [Alexyan@ntu.edu.sg](mailto:Alexyan@ntu.edu.sg) (Qingyu Yan), [tlim@ntu.edu.sg](mailto:tlim@ntu.edu.sg) (Tuti Mariana Lim)



**Figure S1.** (a) Raman spectra of the as-prepared samples obtained at different  $I_{V2O5:sucrose}$  in the hydrothermal process. (i)  $I = 5.00$ , (ii)  $I = 2.50$ , (iii)  $I = 1.67$  and (iv)  $I = 1.25$ . (b) XPS C 1s region for the sample prepared at  $I = 1.25$ .



**Figure S2.** CV plots of VO<sub>2</sub>(B)@C electrodes with different scan rates of 0.1, 0.2, 0.3 and 0.5 mV s<sup>-1</sup> during the 3<sup>rd</sup> cycle. (a) VO<sub>2</sub>(B)@C(4.2 wt%), (b) VO<sub>2</sub>(B)@C(6.6 wt%), (c) VO<sub>2</sub>(B)@C(8.4 wt%) and (d) VO<sub>2</sub>(B)@C(9.6 wt%).