Supporting information for

Reduced Graphene Oxide Supported Highly Porous V₂O₅ Spheres as a High-Power Cathode Material for Lithium Ion Batteries

Xianhong Rui,[ab] **Jixin Zhu,**[a] **Daohao Sim,**[a] **Chen Xu,**[a] **Yi Zeng,**[a] **Huey Hoon Hng,**[a] **Tuti Mariana Lim,**[*bc] **and Qingyu Yan**[*ade]

[a]*School of Materials Science and Engineering, Nanyang Technological University, 639798, Singapore*

[b]*School of Civil and Environmental Engineering, Nanyang Technological University, 639798, Singapore*

[c]*School of Life Sciences and Chemical Technology, Ngee Ann Polytechnic, 599489, Singapore*

[d]*Energy Research Institute, Nanyang Technological University, 637459, Singapore*

[e]*TUM CREATE Centre for Electromobility, Nanyang Technological University, 637459, Singapore*

---

* Corresponding author. Tel: +65 6790 4583, Fax: +65 6790 9081
E-mail addresses: Alexyan@ntu.edu.sg (Qingyu Yan), tmlim@ntu.edu.sg (Tuti Mariana Lim)
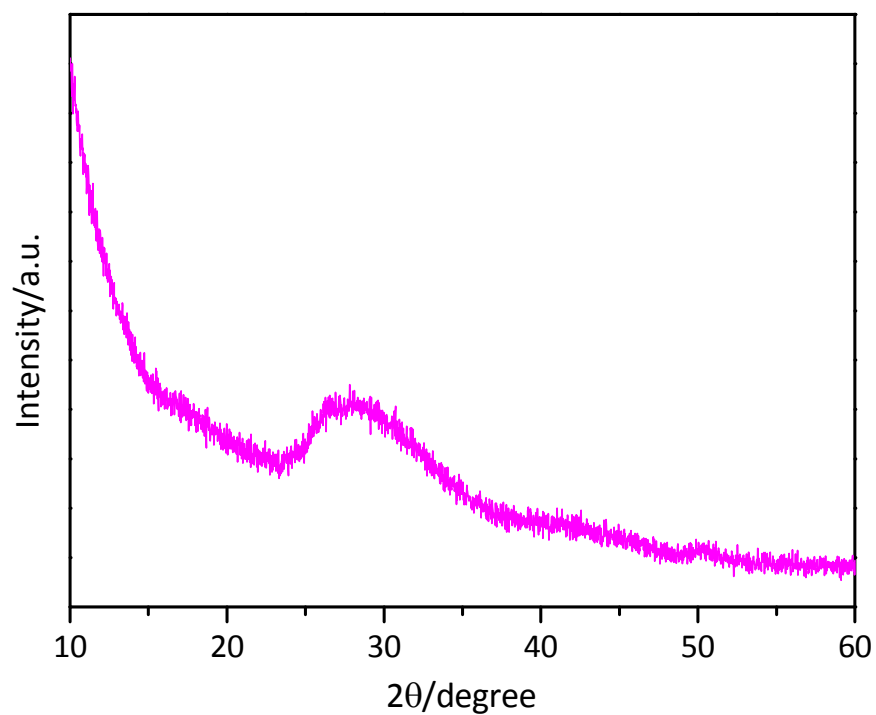
Figure S1. XRD pattern of the rVO sample prepared without GO in the solvothermal process. A broad hump at 2θ of about 30° is attributed to the signal from the sample holder.
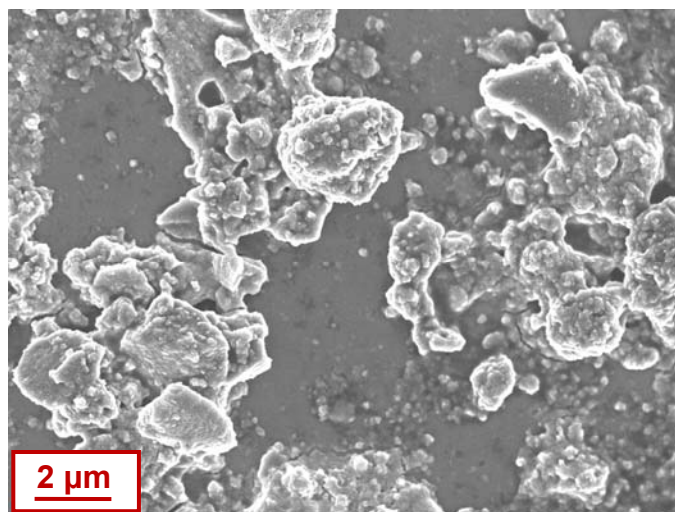
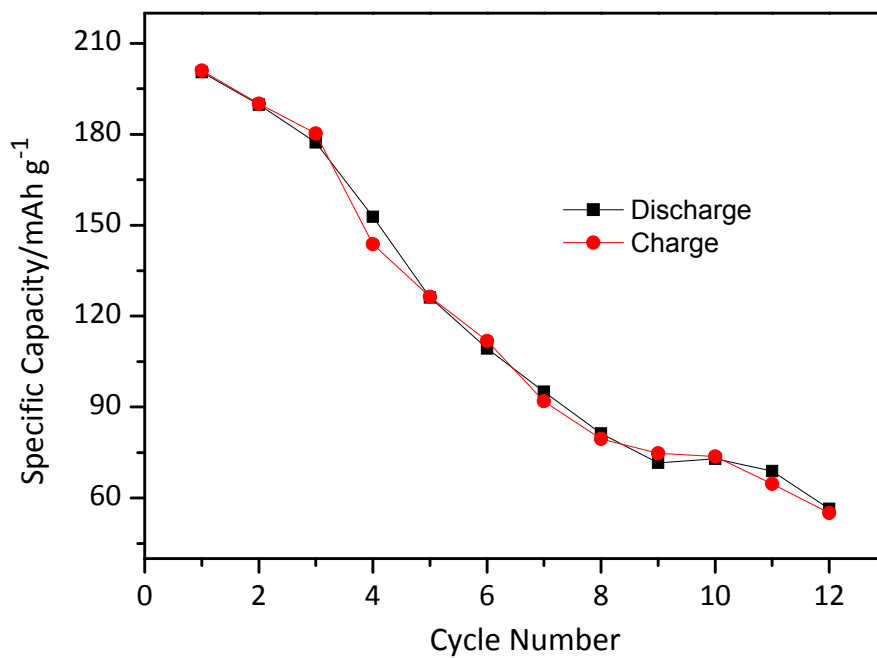**Figure S2.** FESEM image of the rVO sample prepared in the absent of GO.

Figure S3. Cycling performance of the mixture of GO (46 wt%) and ~100 nm V$_2$O$_5$ spheres at a current density of 90 mA g^{-1}.