

Electronic Supplementary Information

In-situ growth of $(\text{NH}_4)_2\text{V}_{10}\text{O}_{25}\cdot 8\text{H}_2\text{O}$ urchin-like hierarchical arrays as superior electrode for all-solid-state supercapacitors

*Yingchang Jiang, Le Jiang, Zeyi Wu, Peiyu Yang, Haitao Zhang, Zhichang Pan, Linfeng Hu**

Department of Materials Science, Fudan University, Shanghai 200433 (P. R. China)

Beijing Key Laboratory of Ionic Liquids Clean Process, Institute of Process Engineering,
Chinese Academy of Sciences, Beijing 100190, P. R. China.

Corresponding E-mail: linfenghu@fudan.edu.cn

Fig. S1-S3

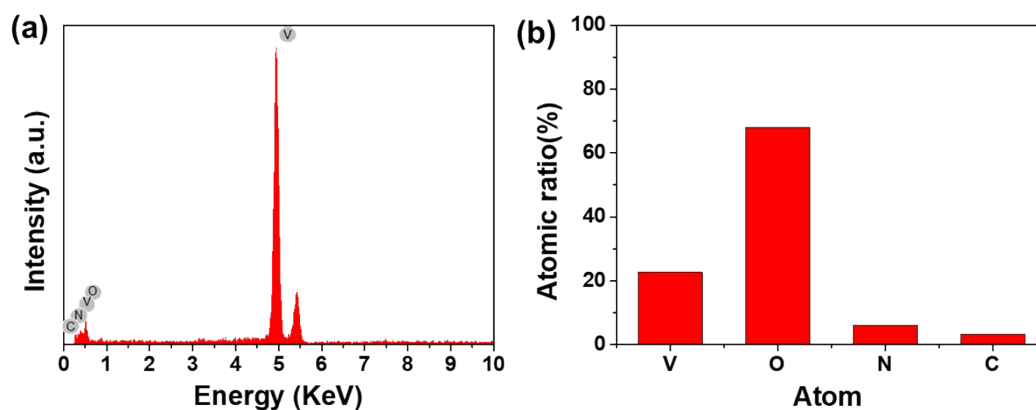


Figure S1.(a, b) EDX spectra (a) and atomic concentration spectrum (b) of $(\text{NH}_4)_2\text{V}_{10}\text{O}_{25} \cdot 8\text{H}_2\text{O}$ microwires.

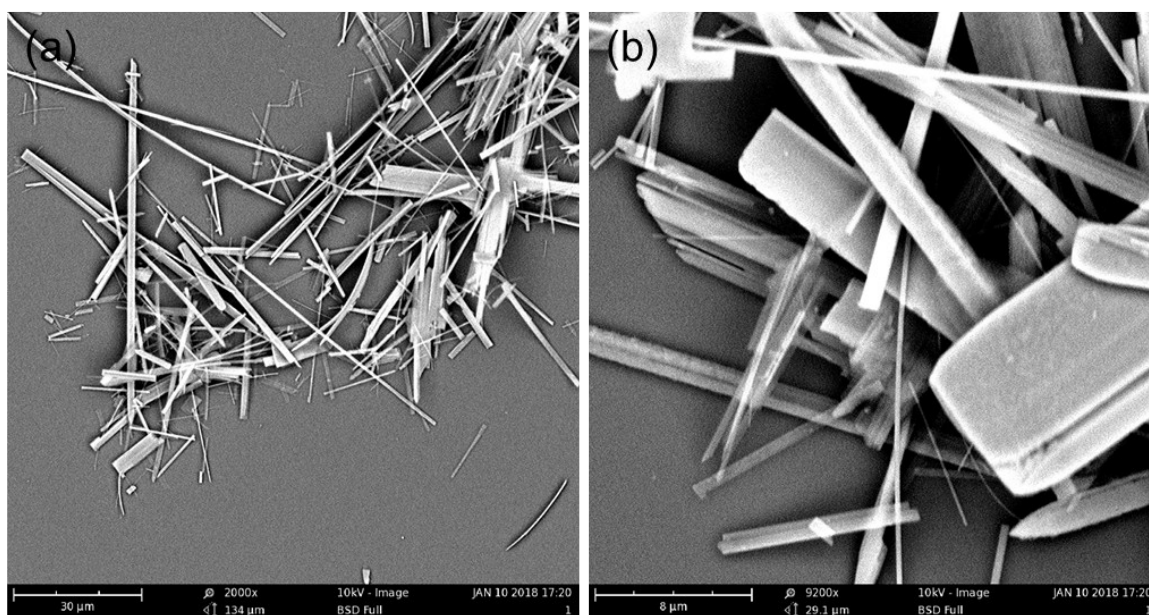


Figure S2. Typical SEM images of the as-grown $(\text{NH}_4)_2\text{V}_{10}\text{O}_{25} \cdot 8\text{H}_2\text{O}$ on the bottom of the hydrothermal autoclave.

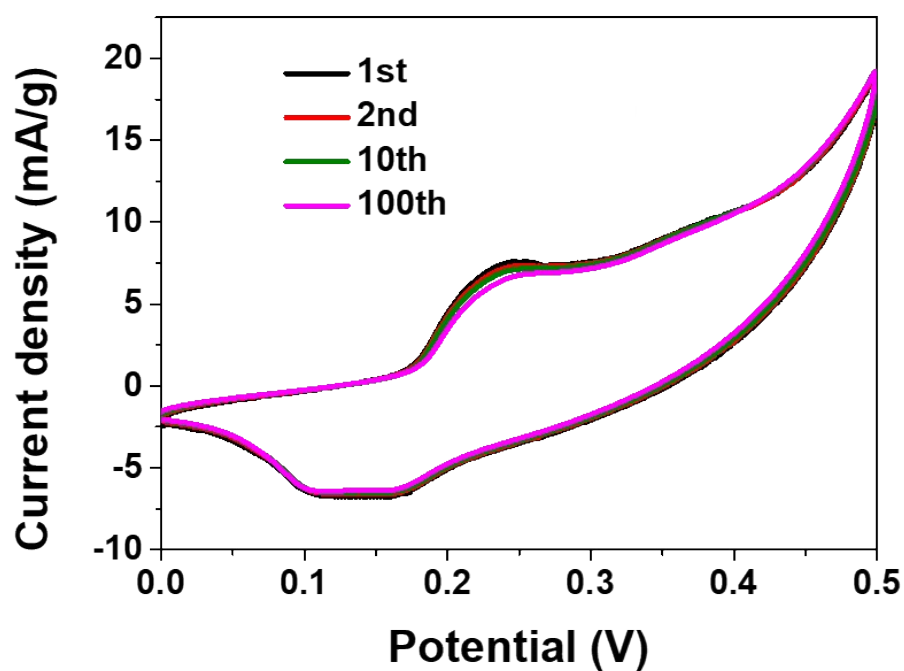


Figure S3. CV curves of the $(\text{NH}_4)_2\text{V}_{10}\text{O}_{25} \cdot 8\text{H}_2\text{O}$ @Ni electrode at different scan cycles.

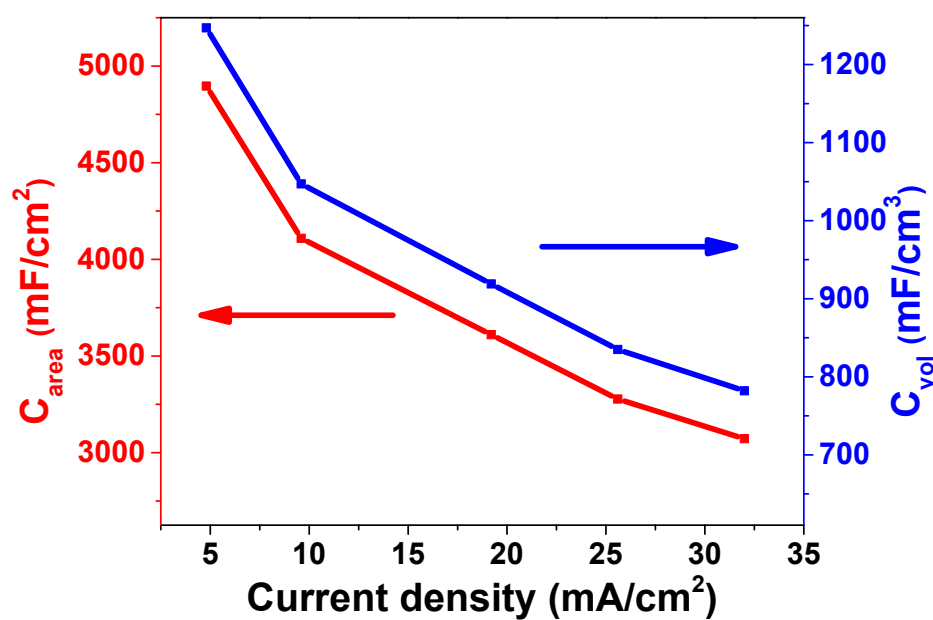


Figure S4. Areal and volumetric specific capacitances of the $(\text{NH}_4)_2\text{V}_{10}\text{O}_{25} \cdot 8\text{H}_2\text{O}$ @Ni electrode calculated from the corresponding discharge curves, respectively.