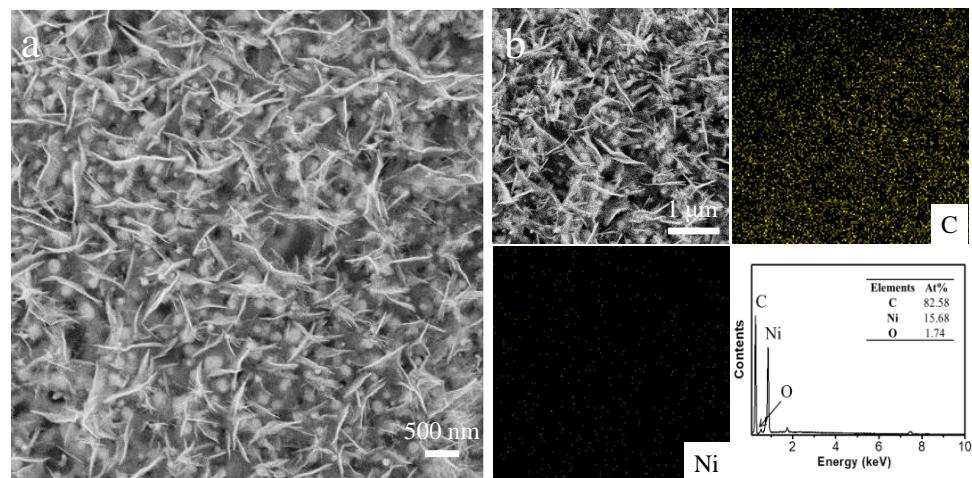


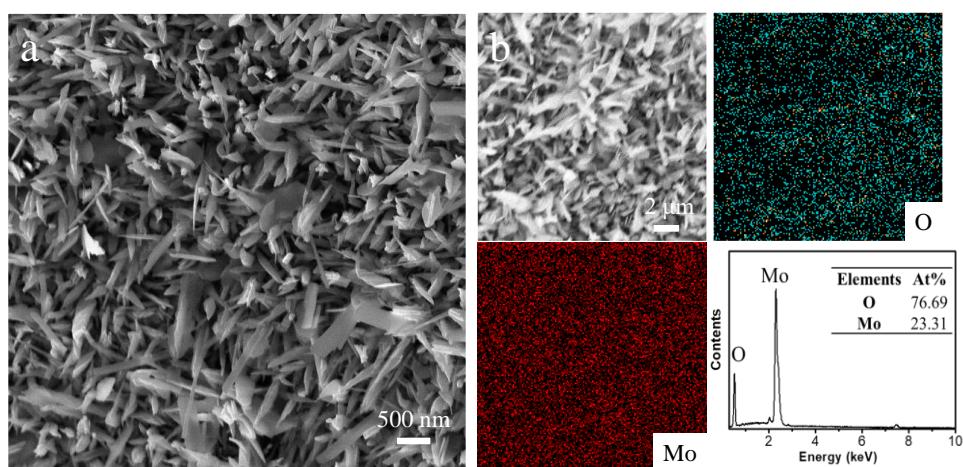
*Supplementary Materials*

# Self-Assembly Vertical Graphene-Based MoO<sub>3</sub> Nanosheets for High Performance Supercapacitors

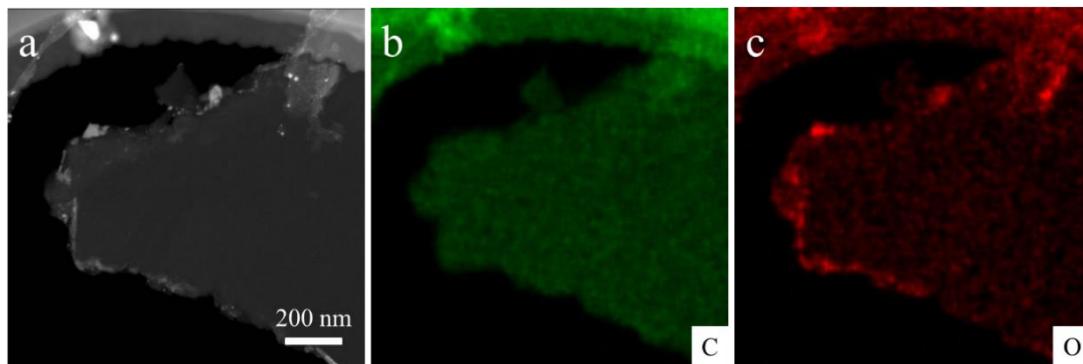
Ao Cheng, Yan Shen <sup>\*</sup>, Tianzeng Hong, Runze Zhan, Enzi Chen, Zengrui Chen, Guowang Chen, Muyuan Liang, Xin Sun, Donghang Wang, Linchen Xu, Yu Zhang and Shaozhi Deng



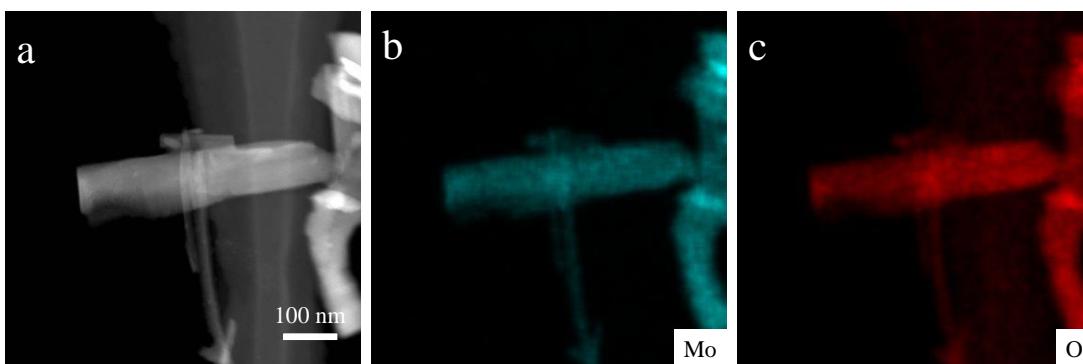
**Figure S1.** Micro-morphologies and material compositions of the pristine VGs. **(a)** Low-magnification SEM image. **(b)** EDS spectrum of the VGs and elemental mapping images of C and Ni in the sample.



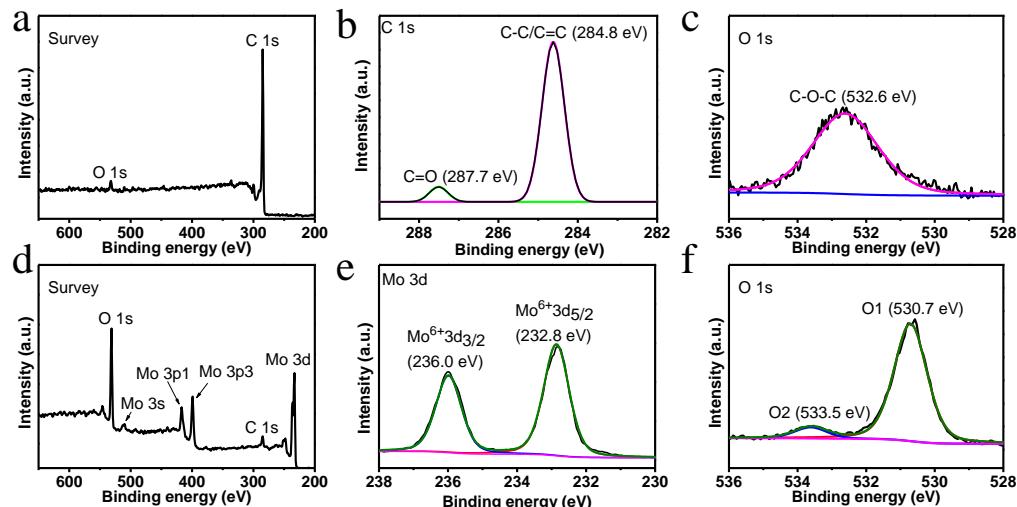
**Figure S2.** Micro-morphologies and material compositions of the pristine MoO<sub>3</sub> nanosheets. **(a)** Low-magnification SEM image. **(b)** EDS spectrum of the MoO<sub>3</sub> nanosheets and elemental mapping images of Mo and O in the sample.



**Figure S3.** TEM HADDF image and elemental mapping images of the pristine VG. (a) HAADF image. (b,c) Mapping images of different elements C and O existing in the sample.



**Figure S4.** TEM HADDF image and elemental mapping images of the pristine  $\text{MoO}_3$  nanosheet. (a) HAADF image. (b,c) Mapping images of different elements Mo and O existing in the sample.



**Figure S5.** XPS characterizations of the pristine VGs and  $\text{MoO}_3$  nanosheets. (a) Wide-scanning survey XPS spectrum of the VGs. (b,c) High-resolution XPS spectra of C 1s and O 1s. (d) Wide-scanning survey XPS spectrum of the  $\text{MoO}_3$  nanosheets. (e,f) High-resolution XPS spectra of Mo 3d and O 1s.