

Supporting Information

Micelle Anchored *In-situ* Synthesis of V₂O₃ nanoflakes@C composites for supercapacitors

Hong-Yi Li,^{a,b*} Kai Jiao,^a Liang Wang,^a Chuang Wei,^a Xinlu Li^a and Bing Xie^a

^aCollege of Materials Science and Engineering, Chongqing University, Chongqing 400044, China.

E-mail: lihongyipku@gmail.com; Fax: +86-23-65127306; Tel: +86-23-65102469.

^bState Key Laboratory of Vanadium and Titanium Resources Comprehensive Utilization,

Panzhihua, Sichuan Province 617000, China.

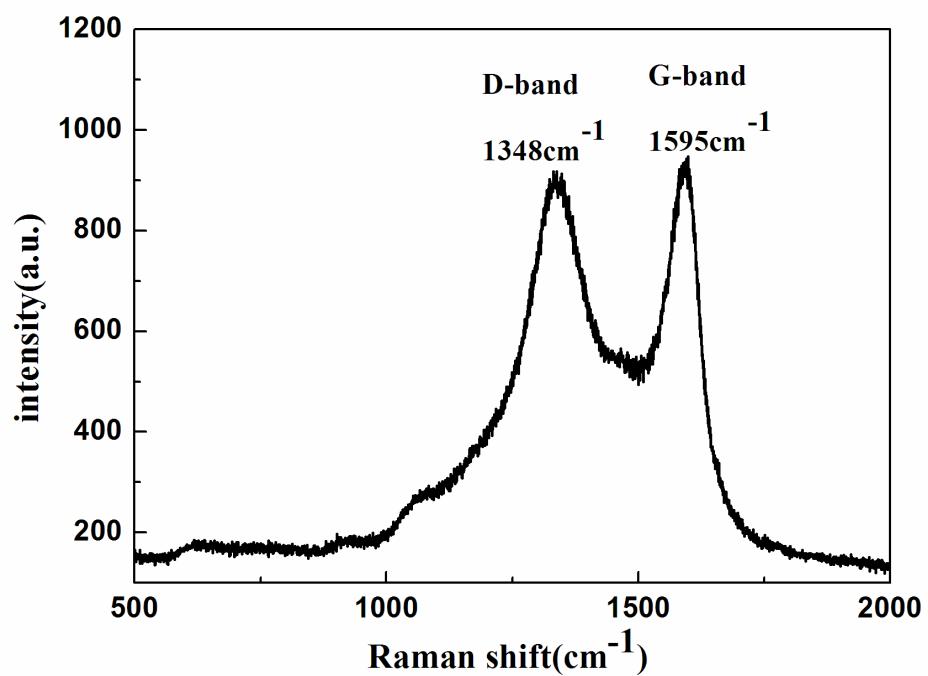


Fig. S1 Raman spectra of activated carbon

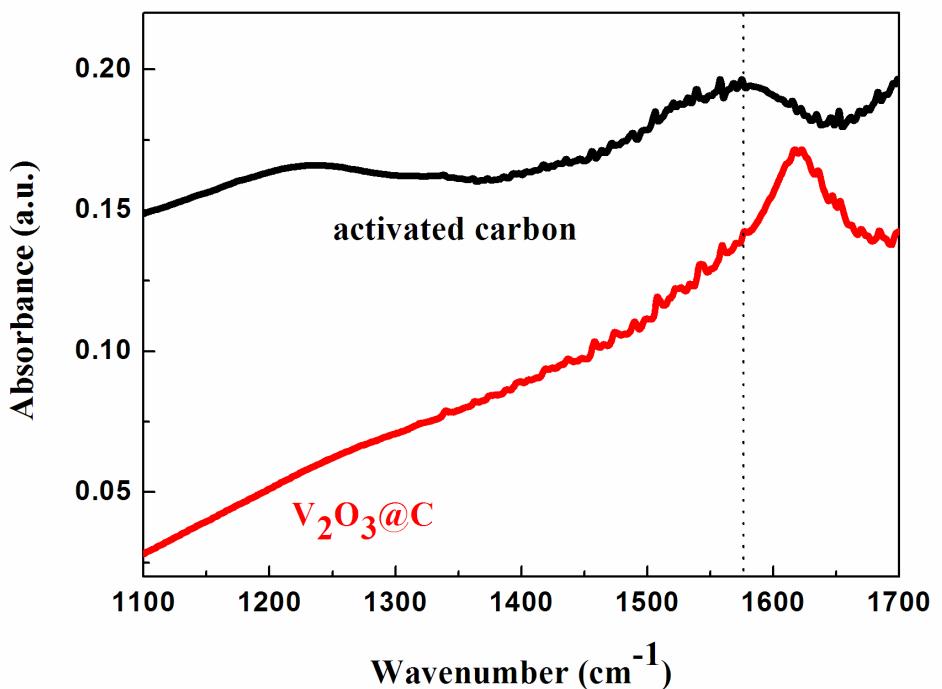


Fig. S2 ATR-FTIR spectra of activated carbon and V_2O_3 nanoflakes@C composites

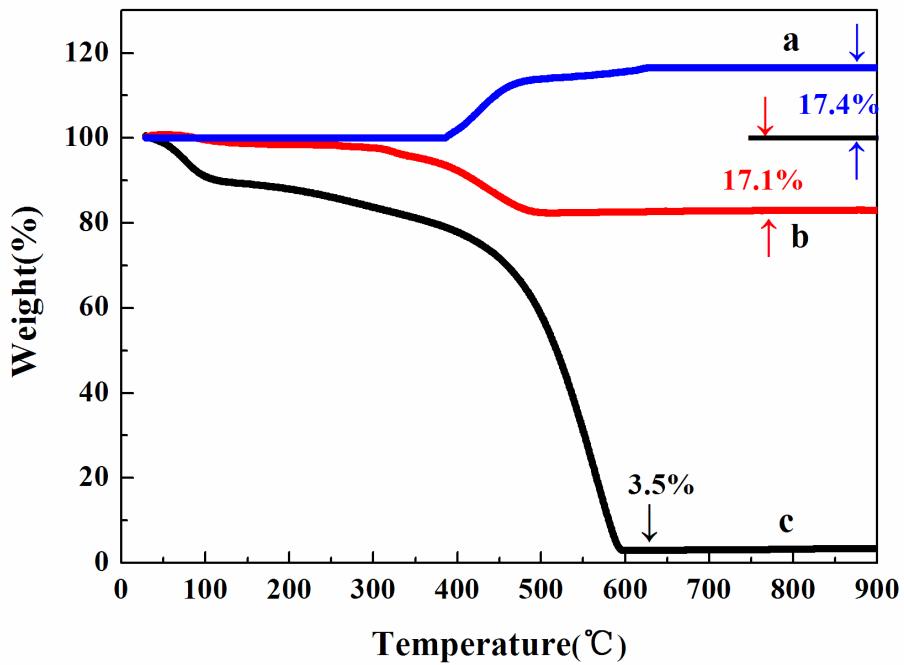


Fig. S3 TGA curves of (a) pure V_2O_3 , (b) V_2O_3 nanoflakes@C composites and (c) activated carbon in air

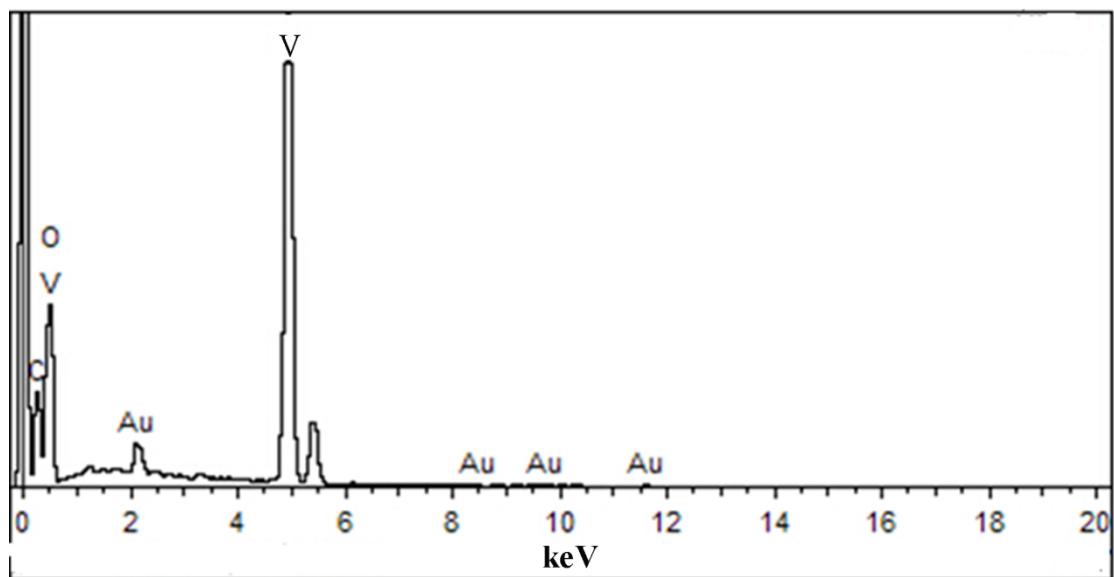


Fig. S4 EDS spectrum of V_2O_3 nanoflakes@C composites

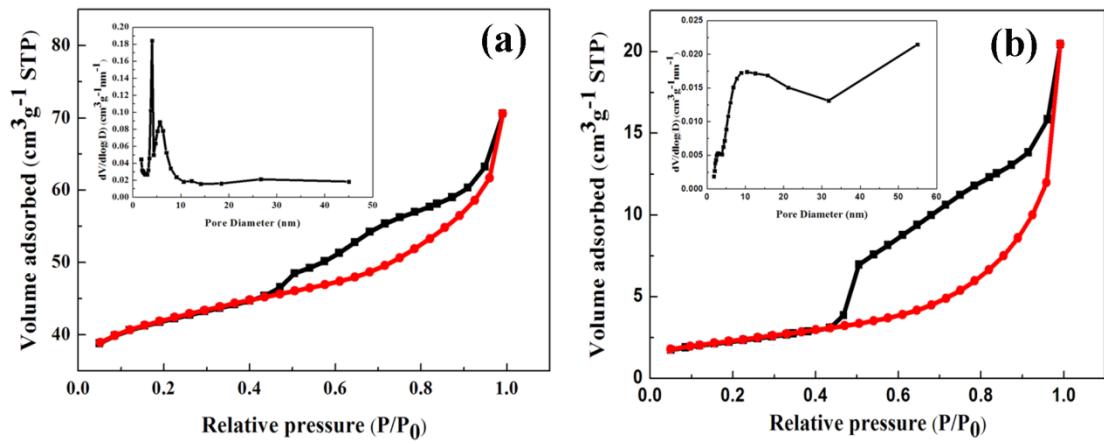


Fig. S5 N_2 adsorption/desorption isotherms and BJH pore-size distribution plots (inset) of (a) V_2O_3 nanoflakes@C composites and (b) bulk V_2O_3 .

◆ desorption; ● adsorption

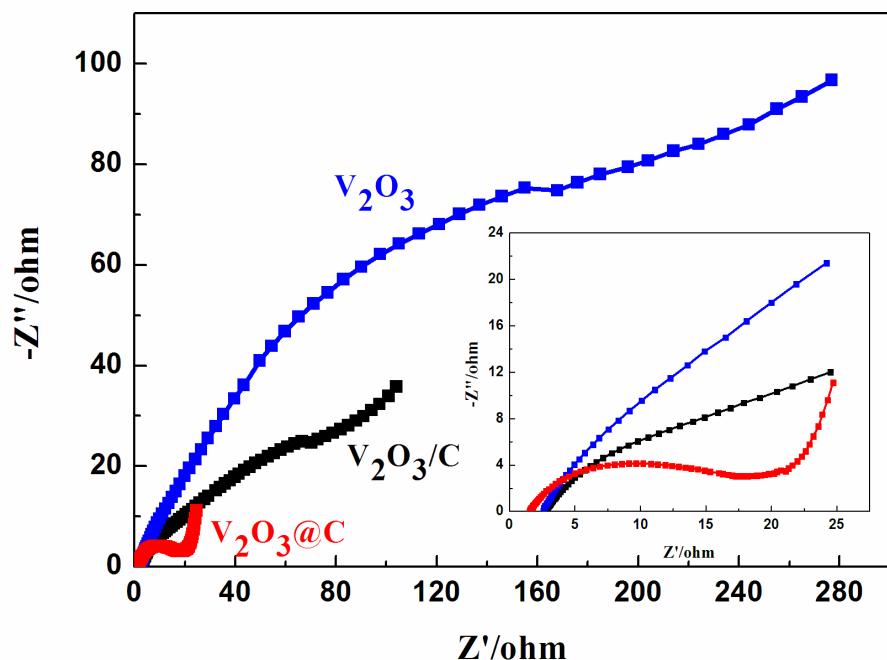


Fig. S6 Comparable Nyquist plots obtained over the frequency range of 100 kHz to 0.01 Hz.

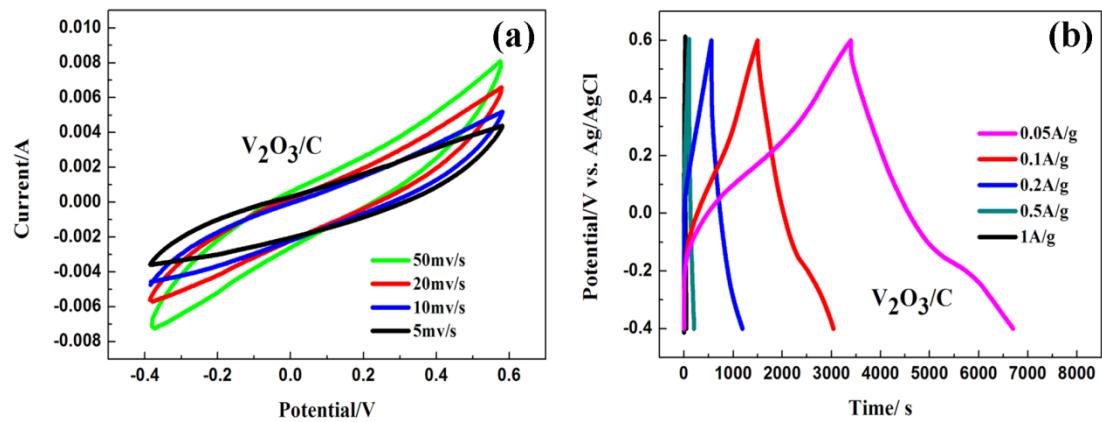


Fig.S7 CV curves (a) and charge/discharge curves (b) of physical mixture $\text{V}_2\text{O}_3/\text{C}$.

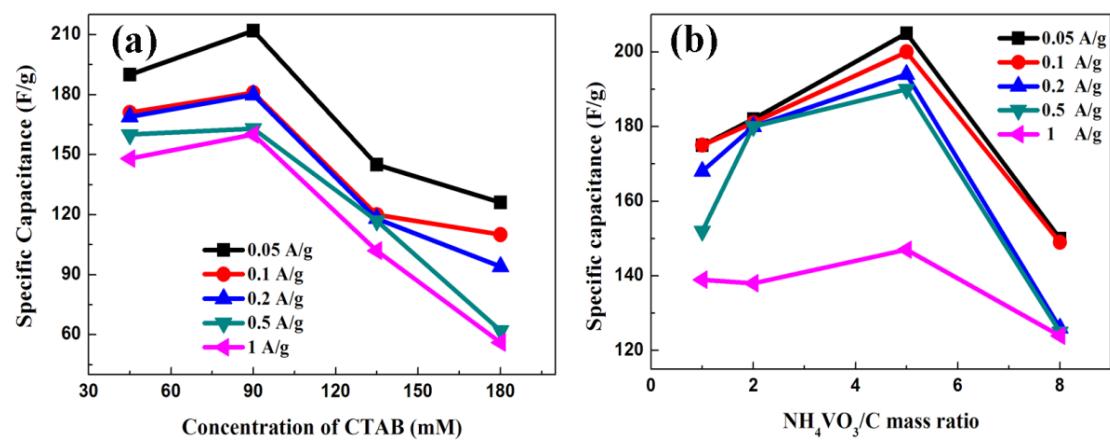


Fig. S8 Specific capacitance changes with (a) concentration of CTAB and (b) $\text{NH}_4\text{VO}_3/\text{C}$ mass ratio