Supplementary Materials: Nitridation Temperature Effect on Carbon Vanadium Oxynitrides for a Symmetric Supercapacitor

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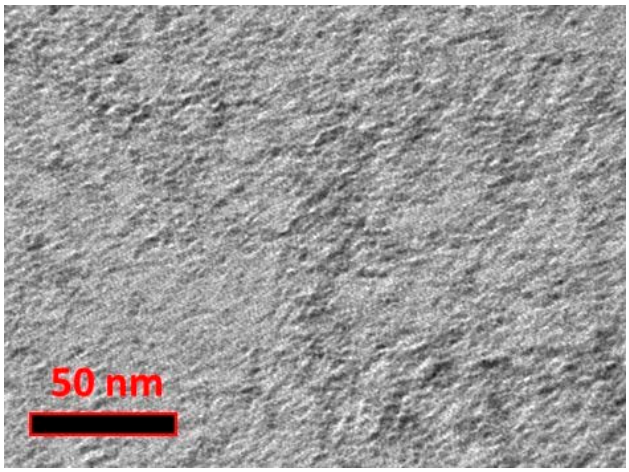

Figure S1: The TEM images of the C-V_2NO@800 °C nanomaterials

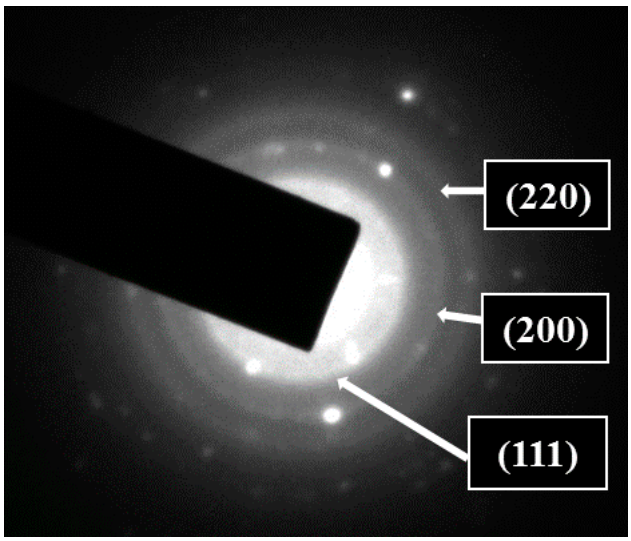

Figure S2: The selected area electron diffraction (SAED) pattern of the C-V_2NO@800 °C nanomaterials

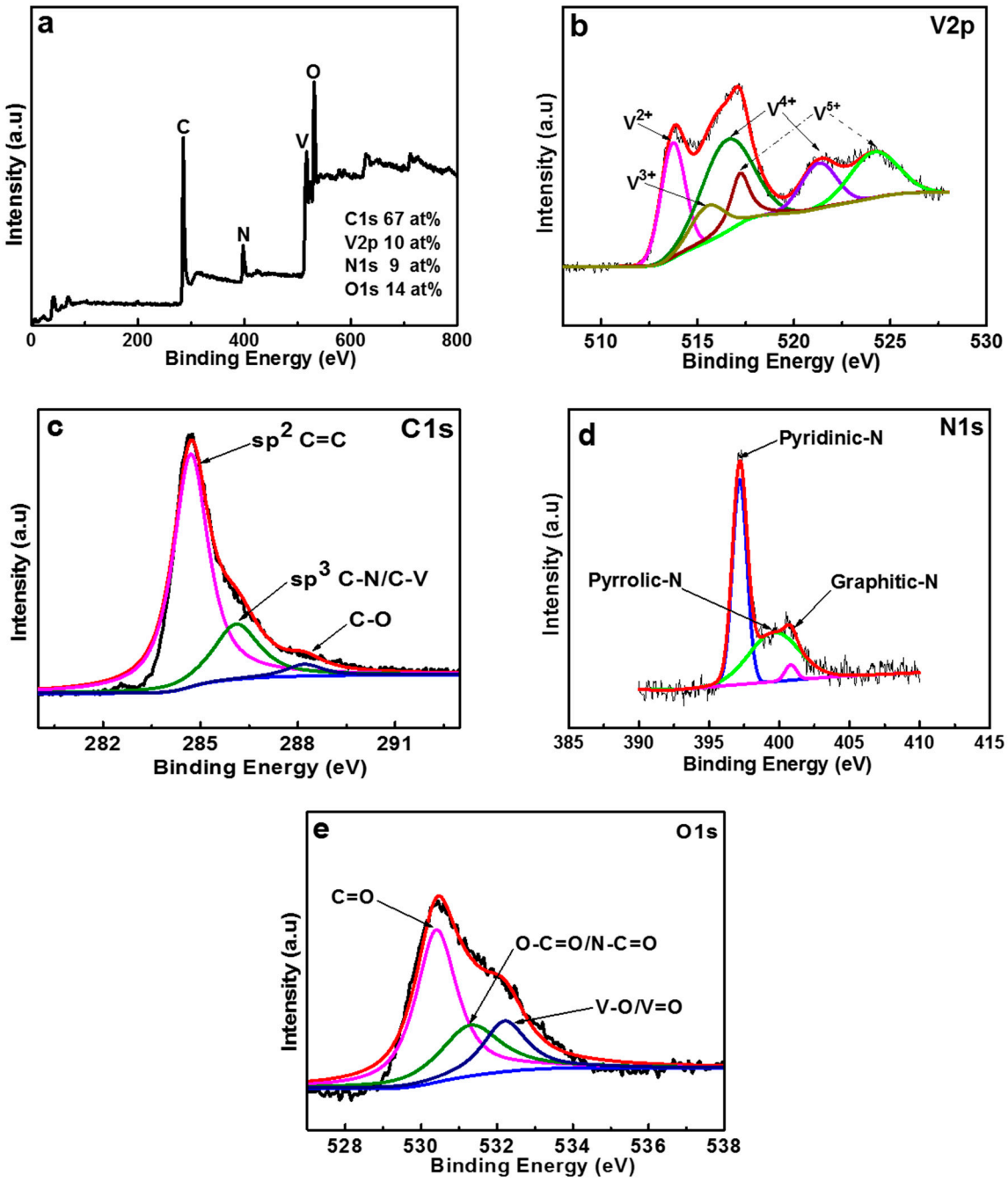

Figure S3: (**a**) Wide scan XPS spectrum of the C-V_2NO@800 °C materials, indicating deconvoluted spectra of (**b**) V2p binding energy region, (**c**) C1s binding energy region, (**d**) N1s binding energy region and (**e**) O1s binding energy regions, respectively.

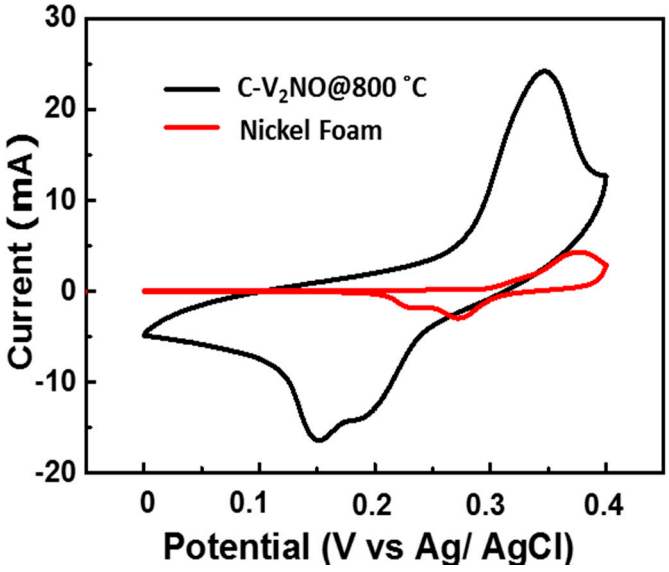

Figure S4: CV plot of the Ni foam and active material at a scan rate of 20 mV s^{-1}

Figure S3 shows the CV curves of nickel foam (NiF) and active material (C-V_2NO@800 °C) at a scan rate of 20 mV s^{-1} in a potential window range of 0–0.4 V. As clearly observed, the CV curve of the active materials presents a superior current response as compared to the CV plot of the current collector. This high current response of the C-V_2NO@800 °C confirms that the current collector (NiF) does not show an effect on the electrochemical performance of the C-V_2NO@800 °C nanomaterials.

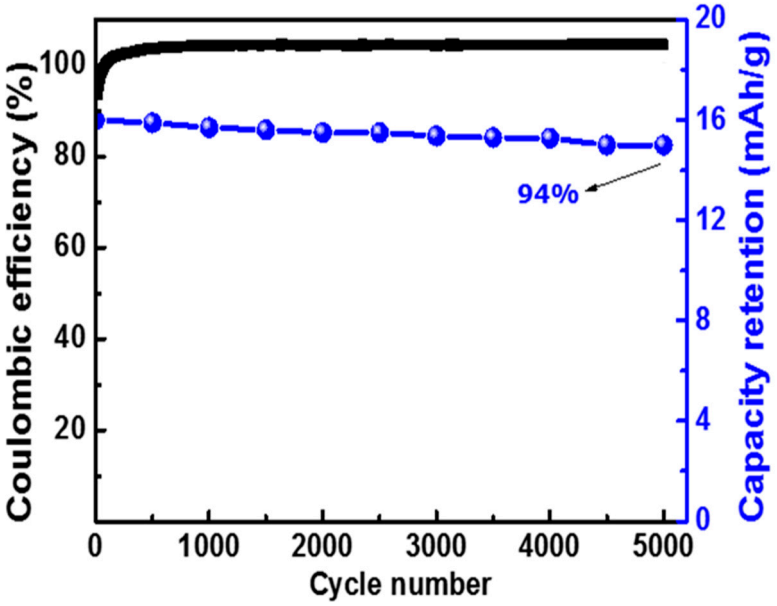

Figure S5: Coulombic efficiency and capacity retention as a function of cycle number at a specific current of 10 A g^{-1} C-V_2NO@800 °C