

Ca-ion Modified Vanadium Oxide Nanoribbons with Enhanced Zn-ion Storage Capability

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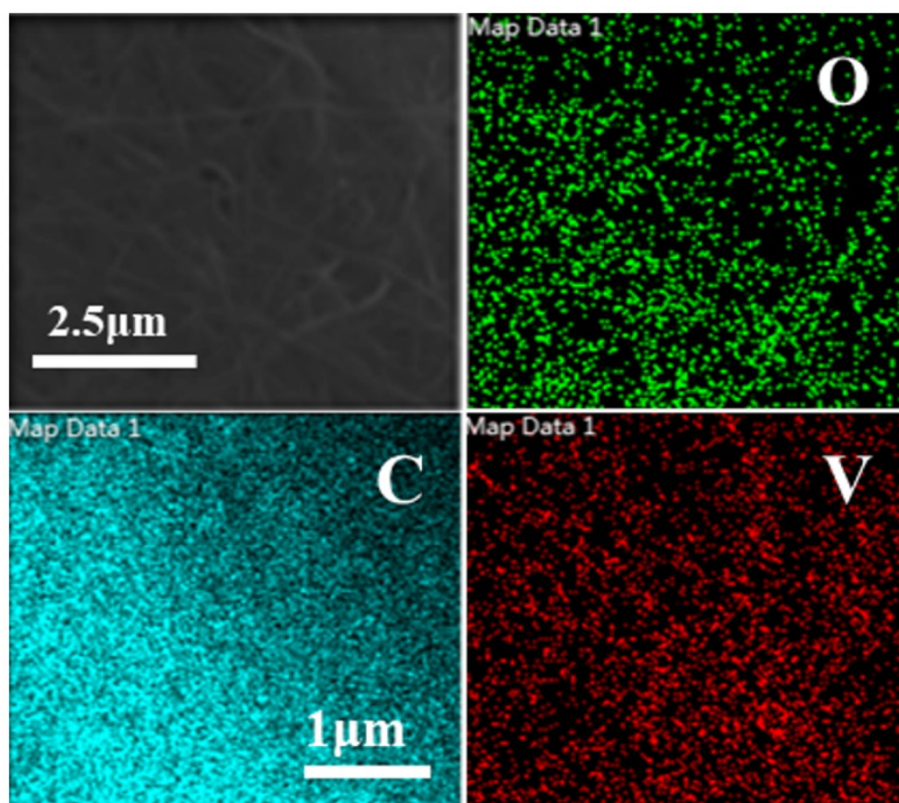


Figure S1. The EDS mapping of the VO sample.

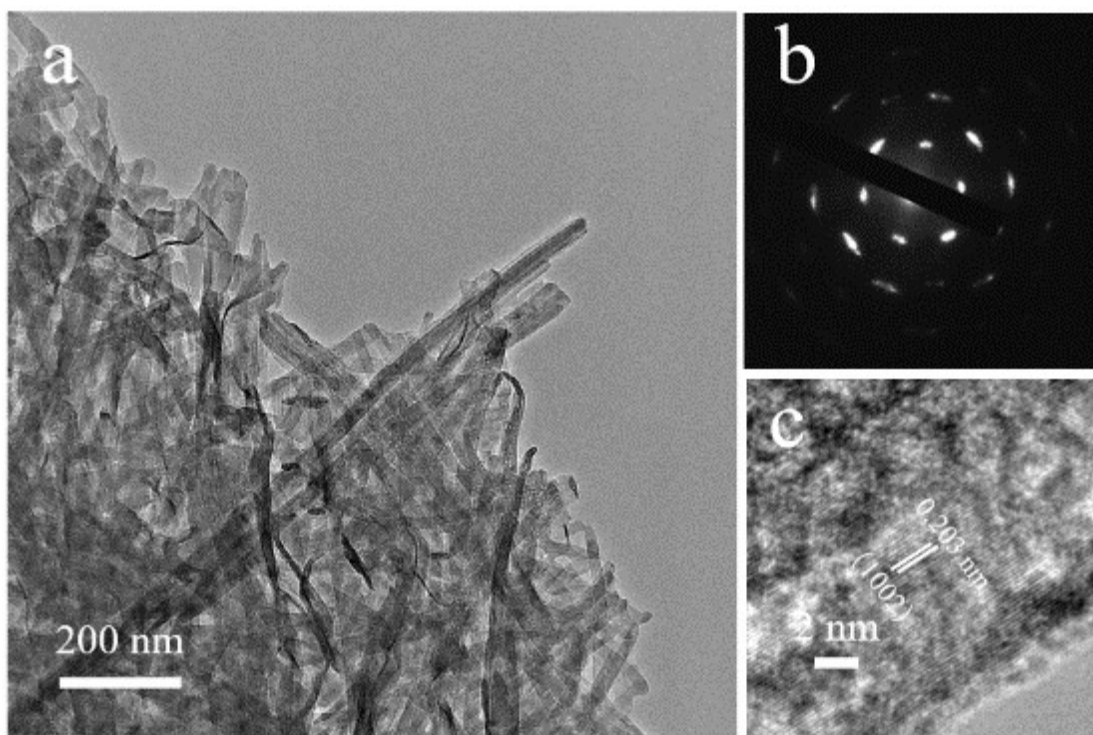


Figure S2. (a, c) TEM and HRTEM images of VO. (b) SAED image.

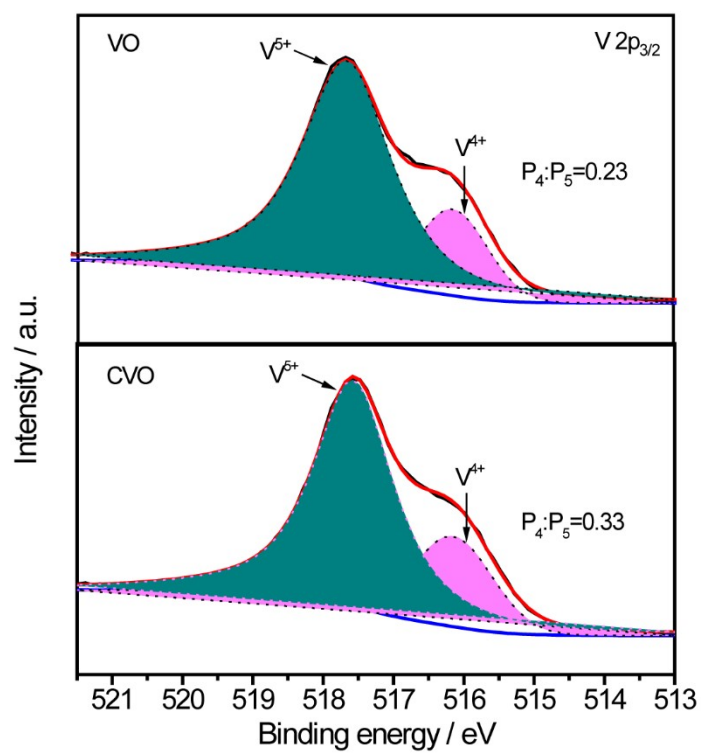


Figure S3 V $2p_{3/2}$ spectra of the synthesized VO and CVO samples.

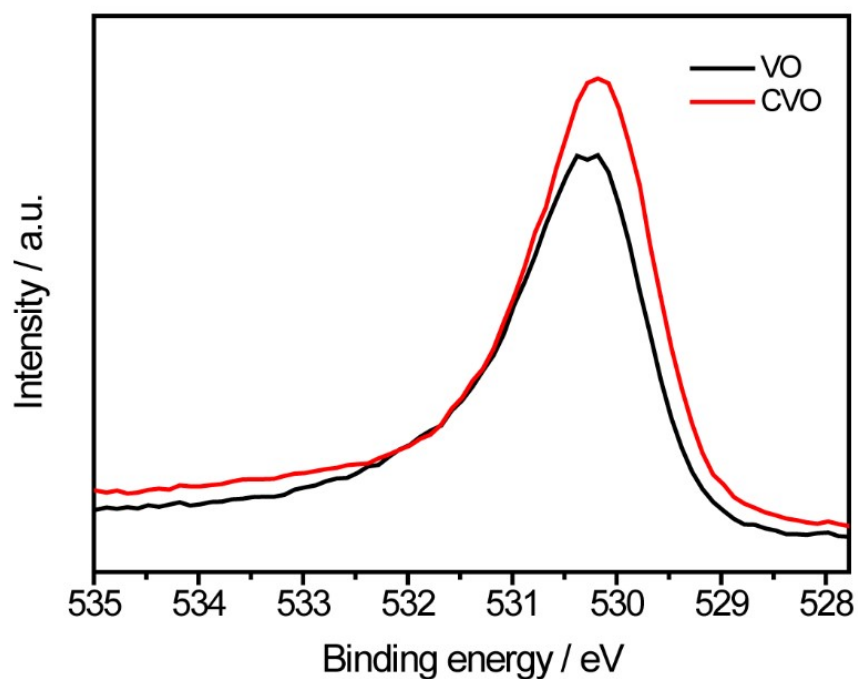


Figure S4. O 1s spectra of the VO and CVO sample.

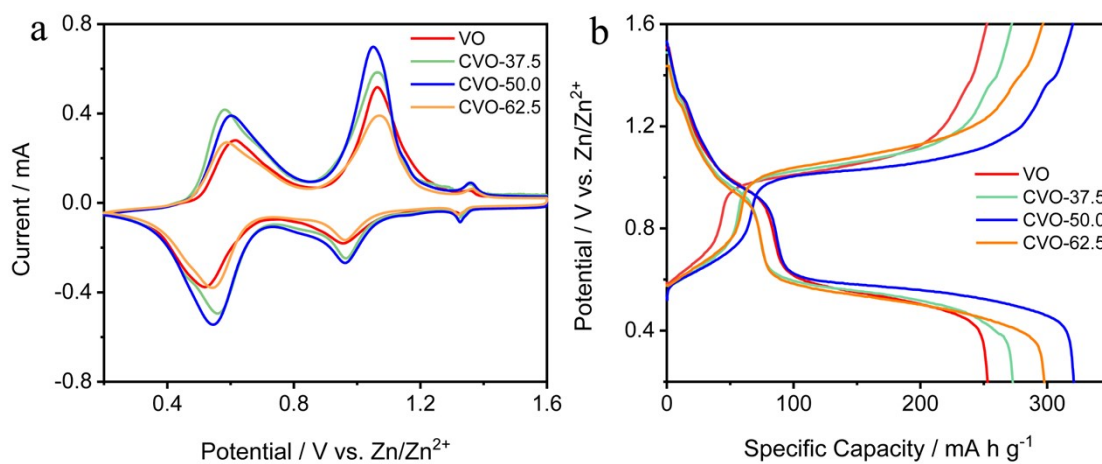


Figure S5 CV and GCD curves of all batteries at a scan rate of 0.1 mV s^{-1} and current density of 2 A g^{-1} .

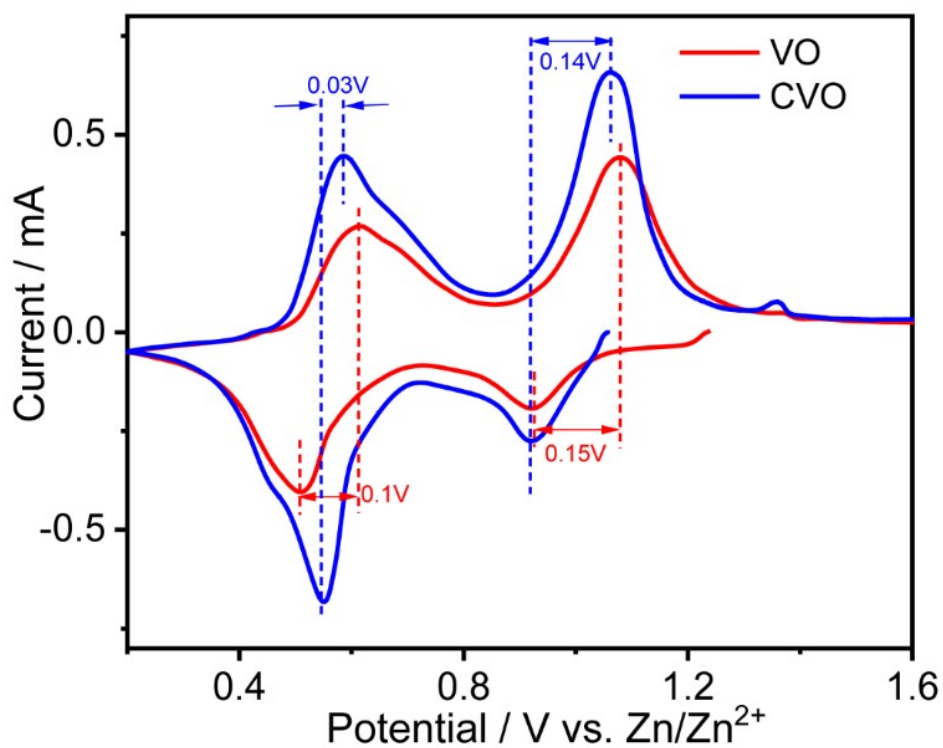


Figure S6. The first CV curve of VO and CVO samples at a scan rate of 0.1 mV s^{-1} .

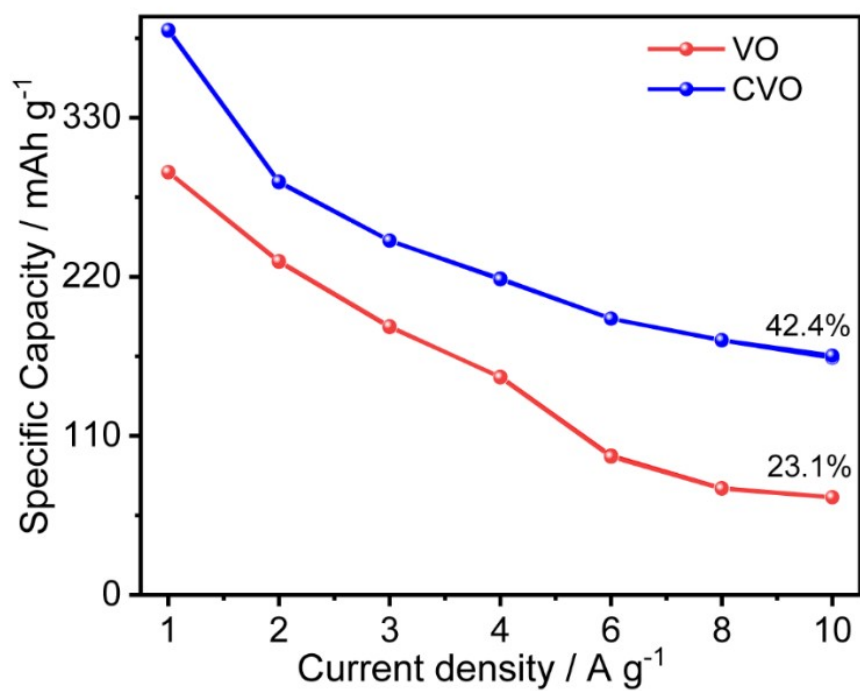


Figure S7. Capacity retention of VO and CVO.

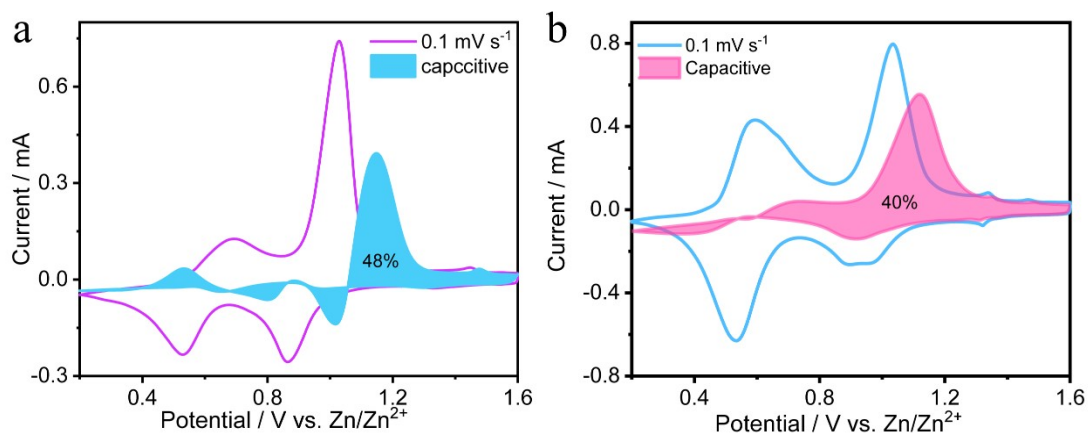


Figure S8. Capacitive contribution (inset) and diffusion contribution of CVO and VO electrode at 0.1 mV s⁻¹.

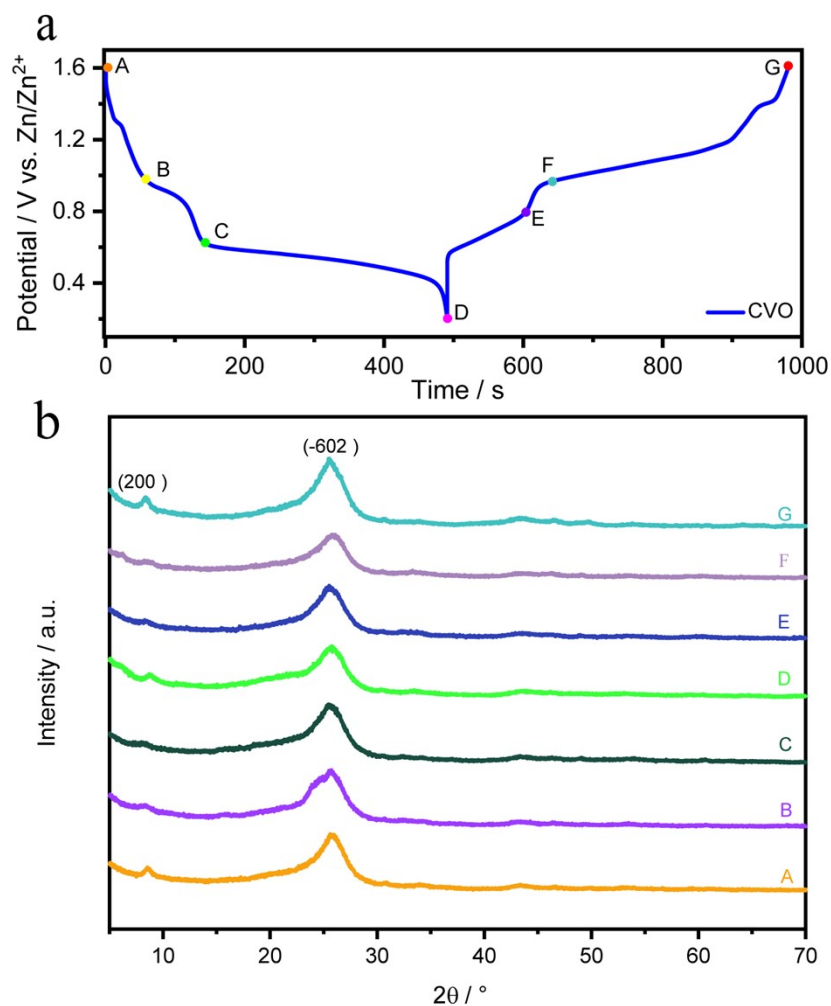


Figure S9 (a) The GCD profile of CVO at 2 A g⁻¹. (b) Ex-situ XRD patterns of CVO

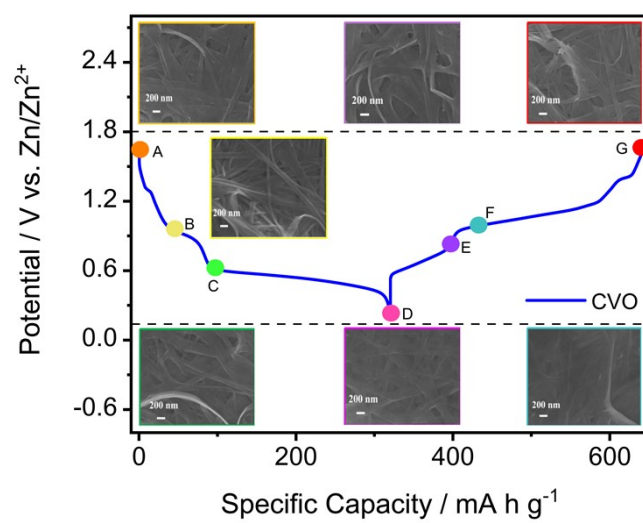


Figure S10 The GCD profile of CVO at 2 A g⁻¹, the insets show the SEM for different state during the charging and discharging process.