

## Supporting Information

# Acetylene Black Induced Heterogeneous Growth of Macroporous $\text{CoV}_2\text{O}_6$ Nanosheet for High-Rate Pseudocapacitive Lithium-Ion Battery Anode

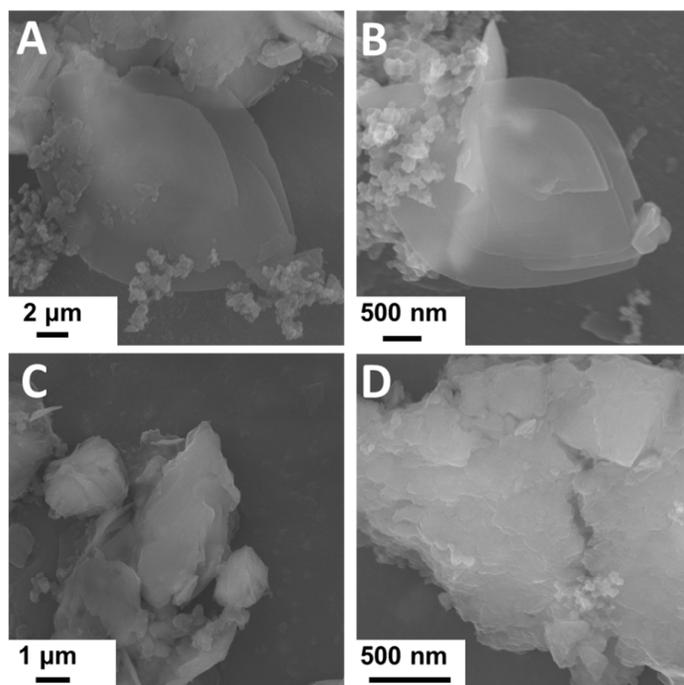
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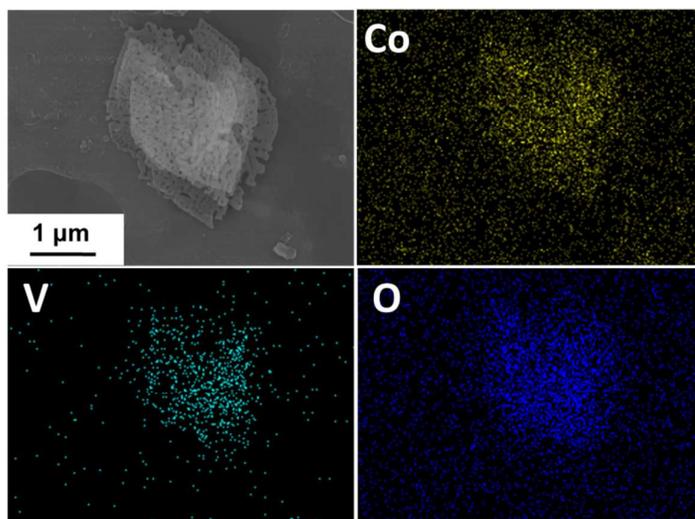
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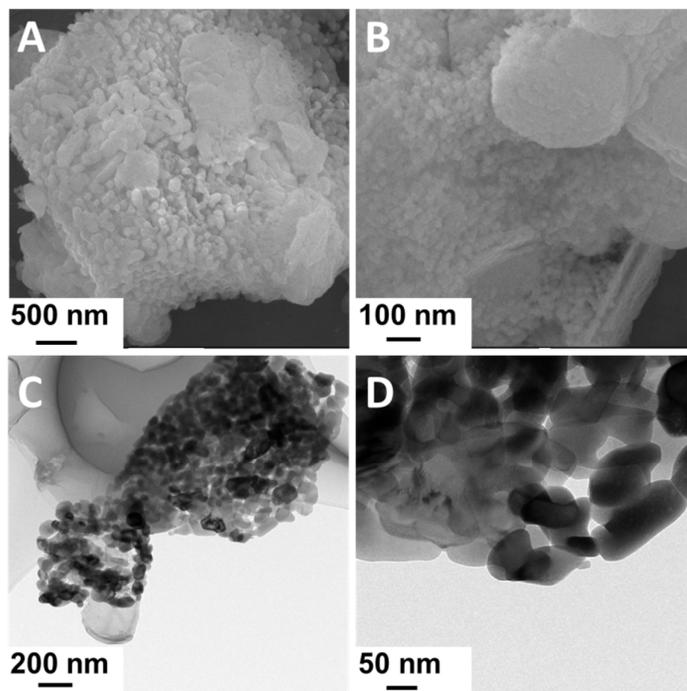
§ These authors contributed equally to this work.



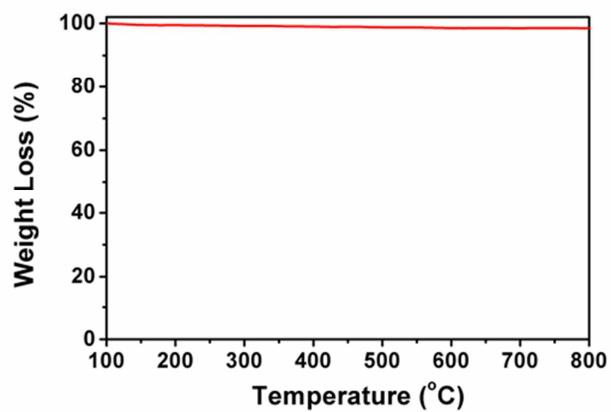
**Figure S1.** SEM images of mCVO precursor (A, B) and bCVO precursor (C, D).



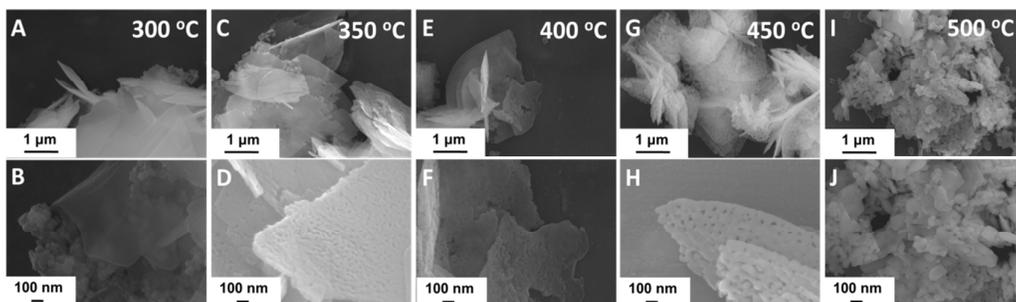
**Figure S2.** EDS mapping of mCVO.



**Figure S3.** (A, B) SEM images of bCVO. (C, D) TEM images of bCVO.

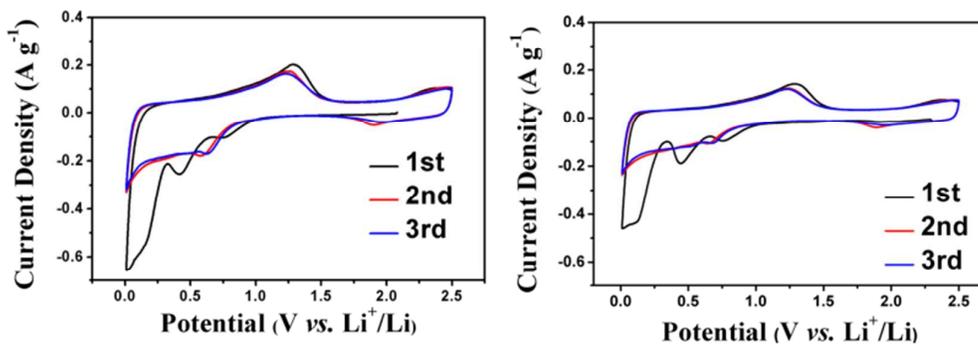


**Figure S4.** TG curve of mCVO.

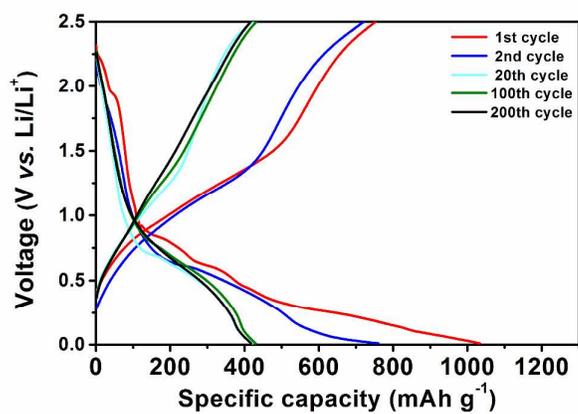


**Figure S5.** SEM images of mCVO after annealing at 300 (A, B), 350 (C, D), 400 (E,

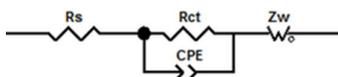
F), 450 (G, H), and 500 (I, J) °C.



**Figure S6.** CV curves of mCVO in the initial three cycles.



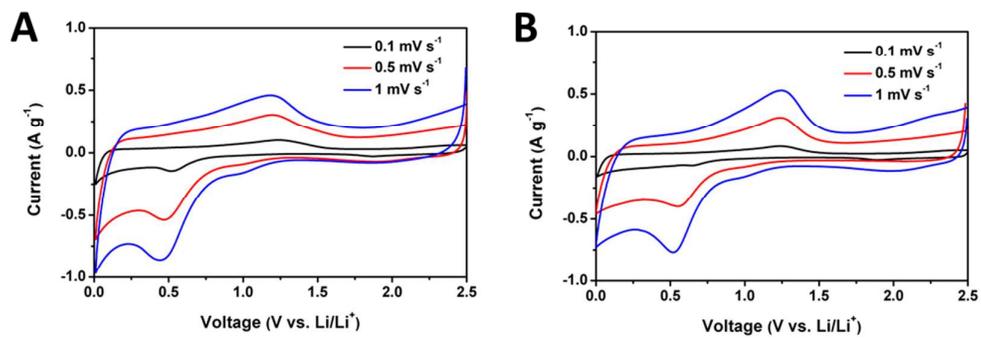
**Figure S7.** Charge-discharge curves of bCVO in the different cycles.



**Figure S8.** The representative equivalent circuit model.

Table S1

	mCVO	bCVO
$R_s$ ( $\Omega$ )	2	2
$R_{ct}$ ( $\Omega$ )	44	134



**Figure S9.** (A, B) CV curves of mCVO and bCVO at different scan rate ranging from 0.1 to 1  $\text{mV s}^{-1}$ , respectively.