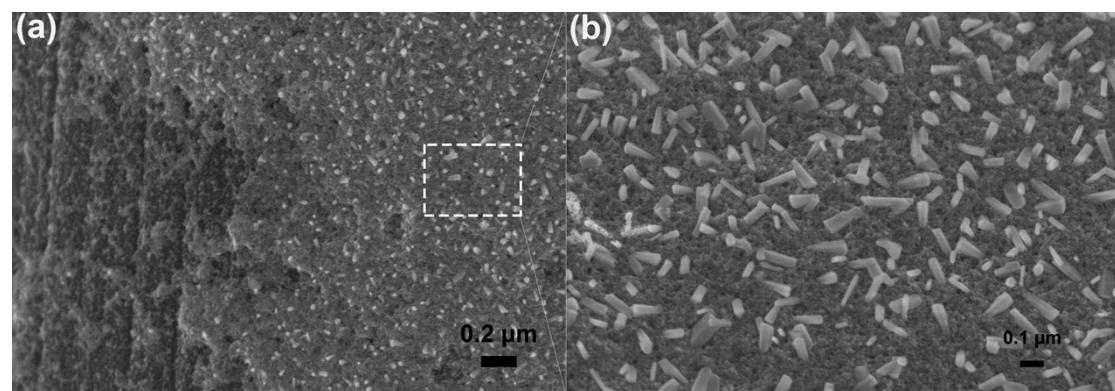


*Supporting information*

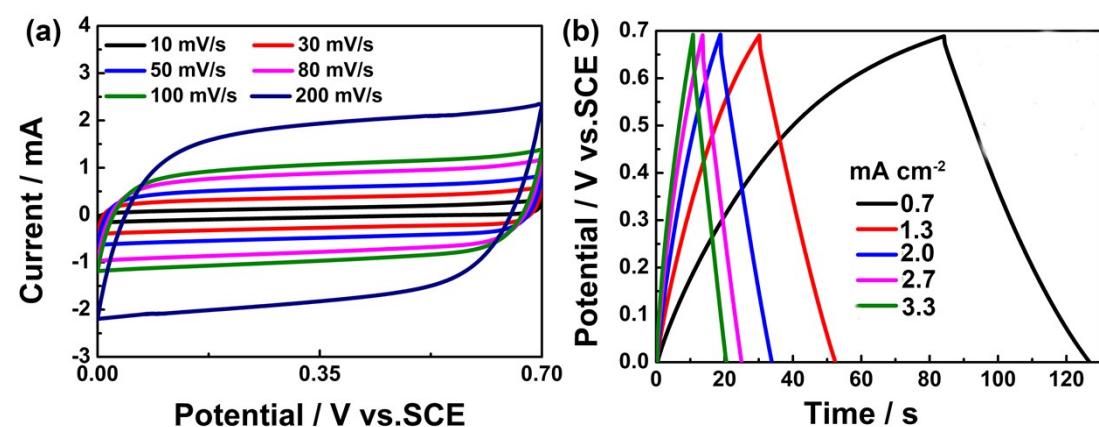
## Fabrication of hollow nanorod electrode based on RuO<sub>2</sub>/Fe<sub>2</sub>O<sub>3</sub> for asymmetric supercapacitor

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**Figure S1.** SEM of RuO<sub>2</sub> electrode without ZnO as template.



**Figure S2.** Electrochemical properties of RuO<sub>2</sub> electrode without ZnO as template.

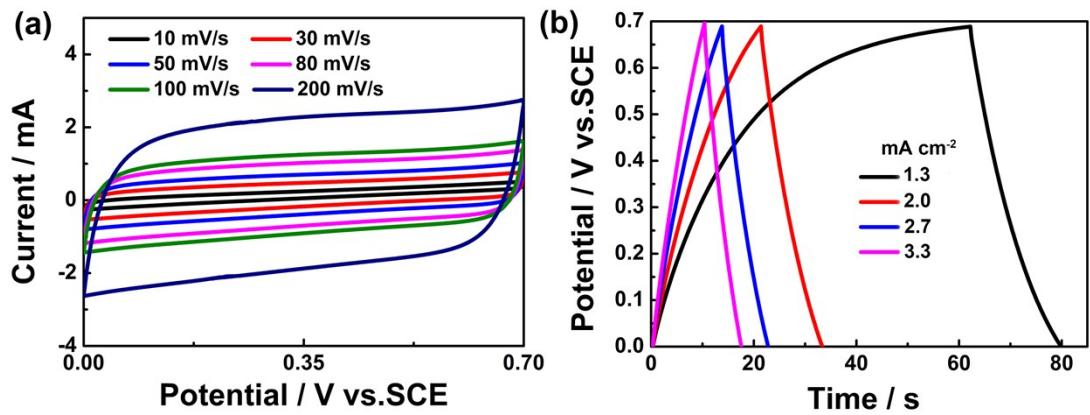


Figure S3. Electrochemical properties of RuO<sub>2</sub>-3 electrode.

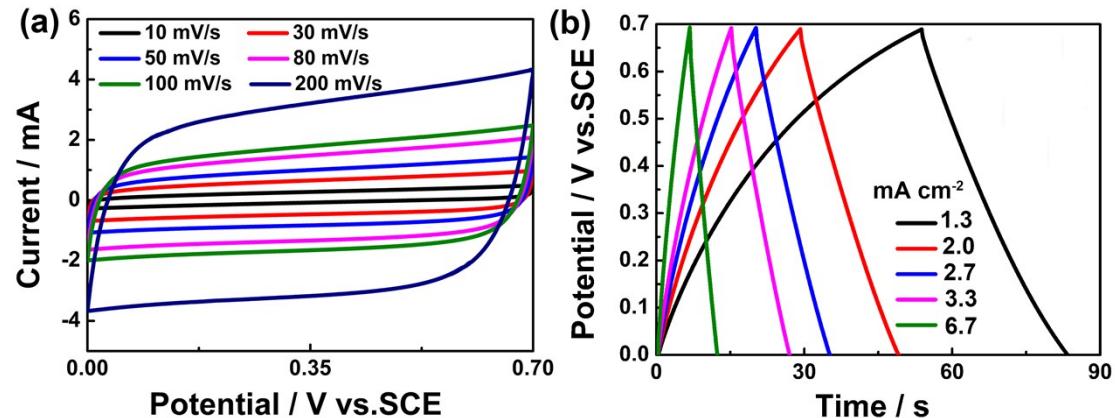


Figure S4. Electrochemical properties of RuO<sub>2</sub>-6 electrode.

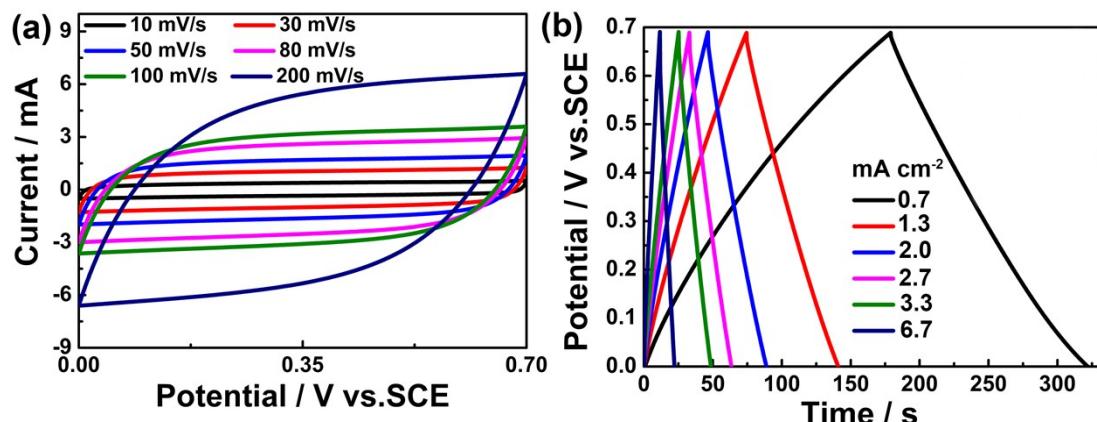
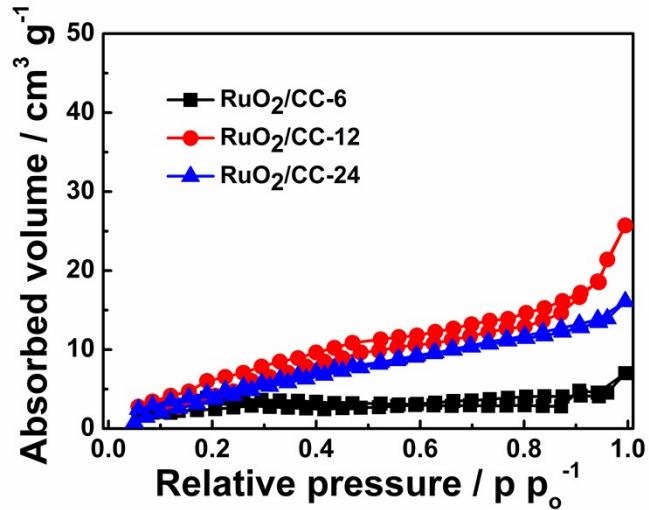
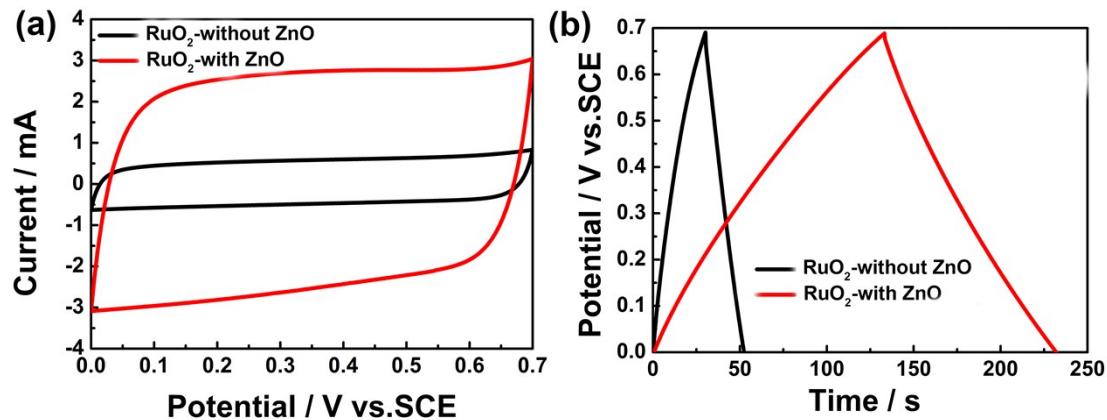


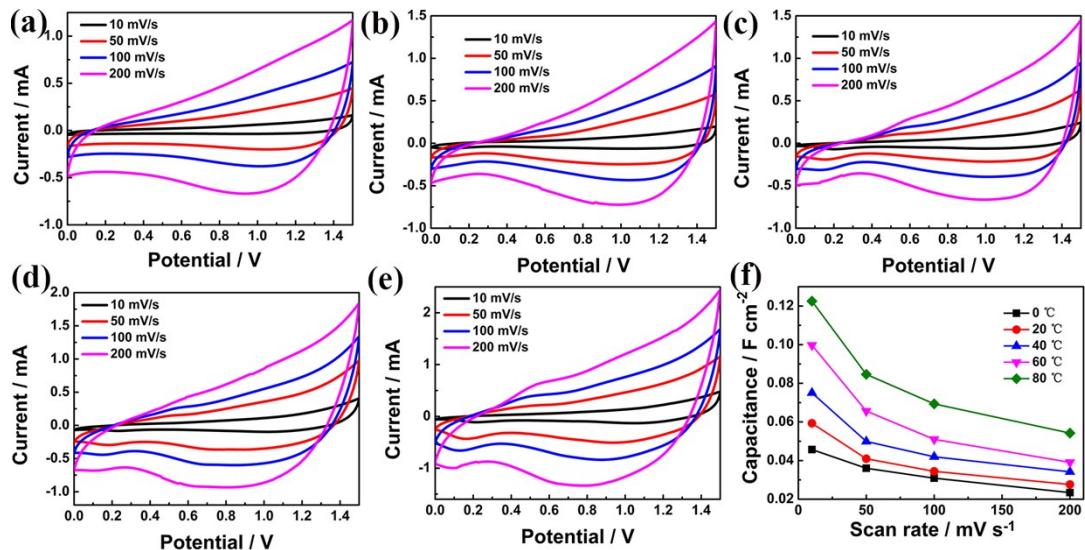
Figure S5. Electrochemical properties of RuO<sub>2</sub>-24 electrode.



**Figure S6.** Nitrogen adsorption-desorption isotherms of RuO<sub>2</sub>.



**Figure S7.** Electrochemical properties comparison of RuO<sub>2</sub> without ZnO as template and RuO<sub>2</sub>-12 electrode.



**Figure S8.** (a-e) CV curves for ASC device under 0, 20, 40, 60 and 80 °C, respectively. (f) Capacitance comparison at different temperatures based on CV curves.