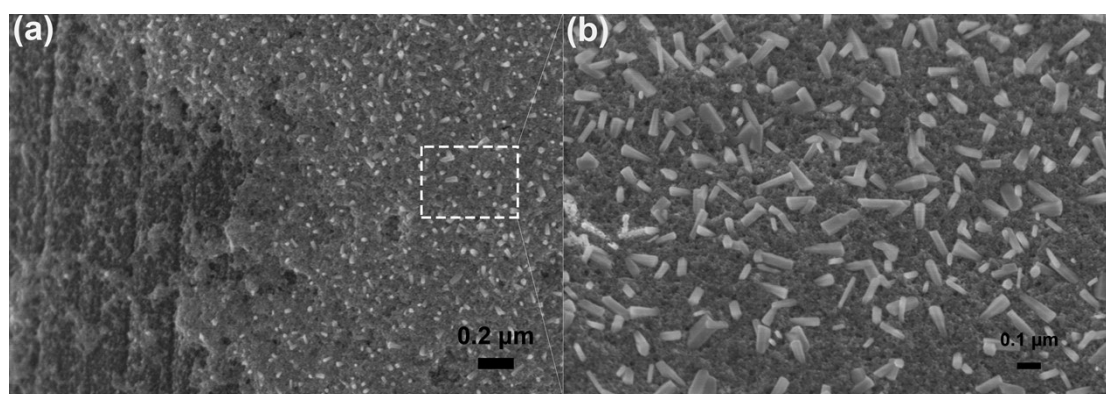


*Supporting information*

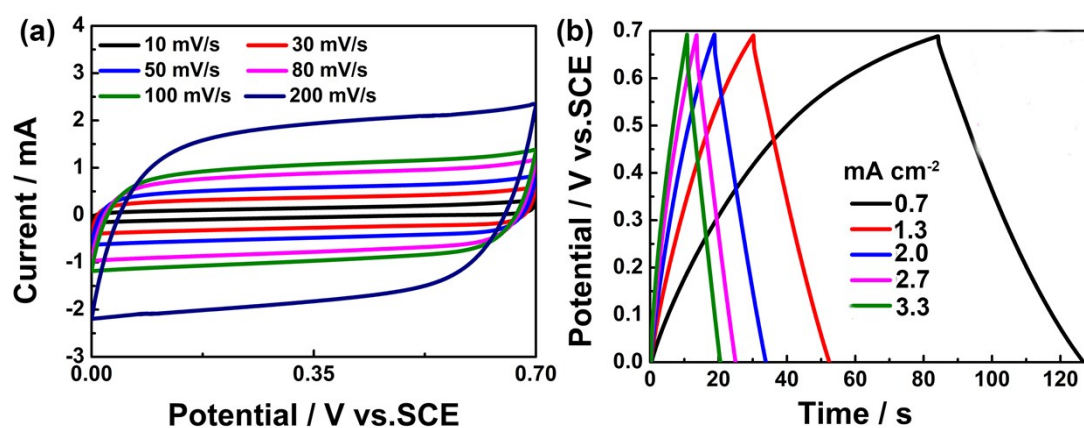
## Fabrication of hollow nanorod electrode based on $\text{RuO}_2//\text{Fe}_2\text{O}_3$ for asymmetric supercapacitor

*Qiufan Wang, Xiao Liang, Yun Ma, Daohong Zhang,\**

Key Laboratory of Catalysis and Materials Science of the State Ethnic Affairs Commission and Ministry of Education, South-Central University for Nationalities, Wuhan, Hubei Province, 430074, P. R. China. E-mail: zhangdh27@163.com



**Figure S1.** SEM of  $\text{RuO}_2$  electrode without ZnO as template.



**Figure S2.** Electrochemical properties of  $\text{RuO}_2$  electrode without ZnO as template.

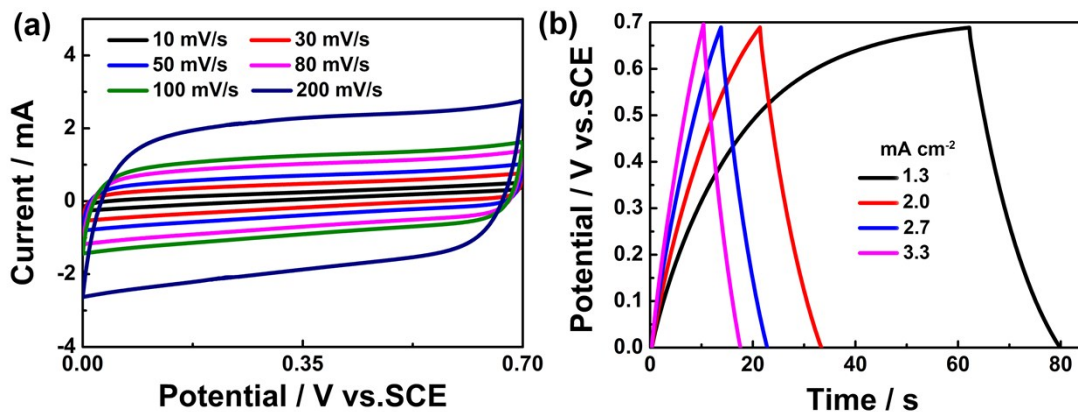


Figure S3. Electrochemical properties of RuO<sub>2</sub>-3 electrode.

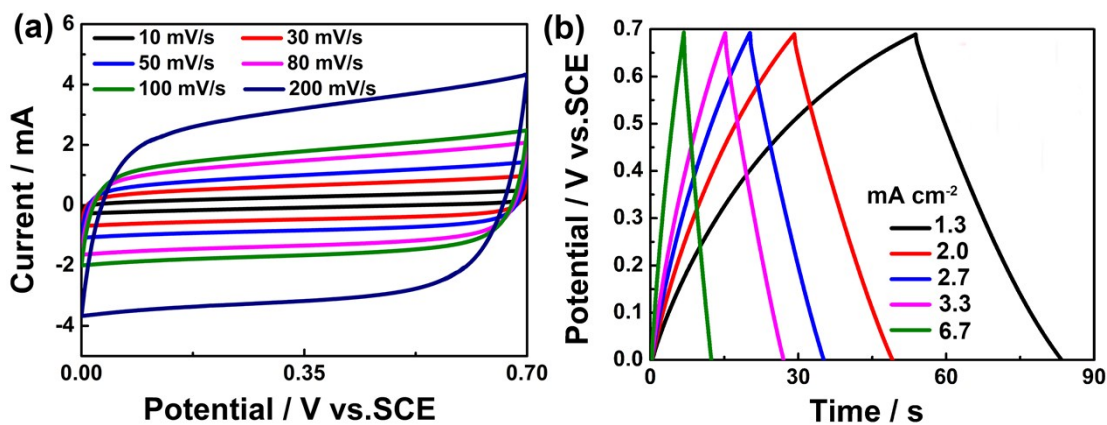


Figure S4. Electrochemical properties of RuO<sub>2</sub>-6 electrode.

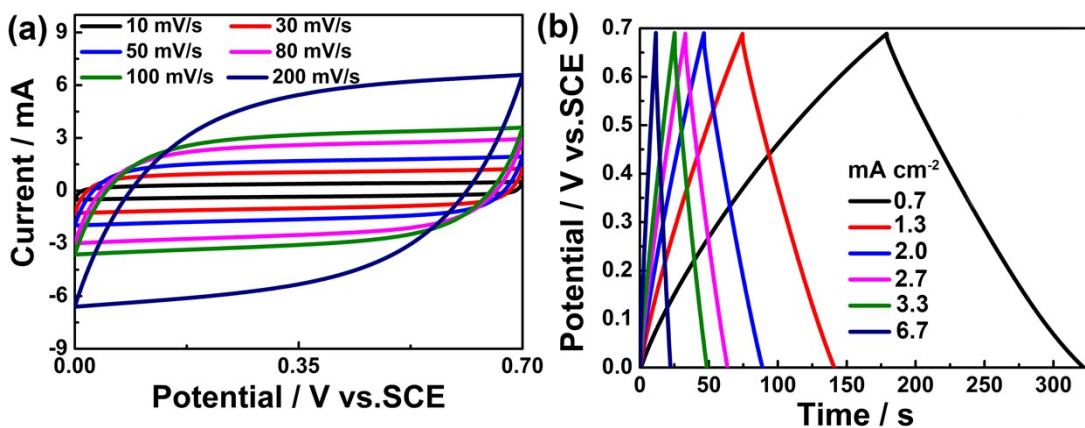


Figure S5. Electrochemical properties of RuO<sub>2</sub>-24 electrode.

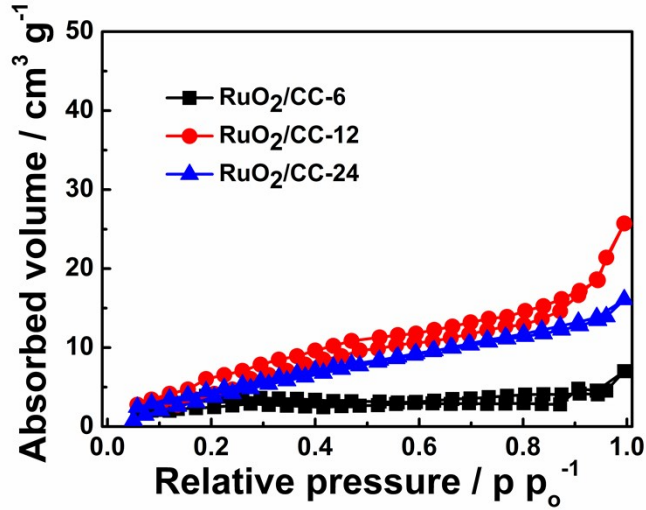


Figure S6. Nitrogen adsorption-desorption isotherms of RuO<sub>2</sub>.

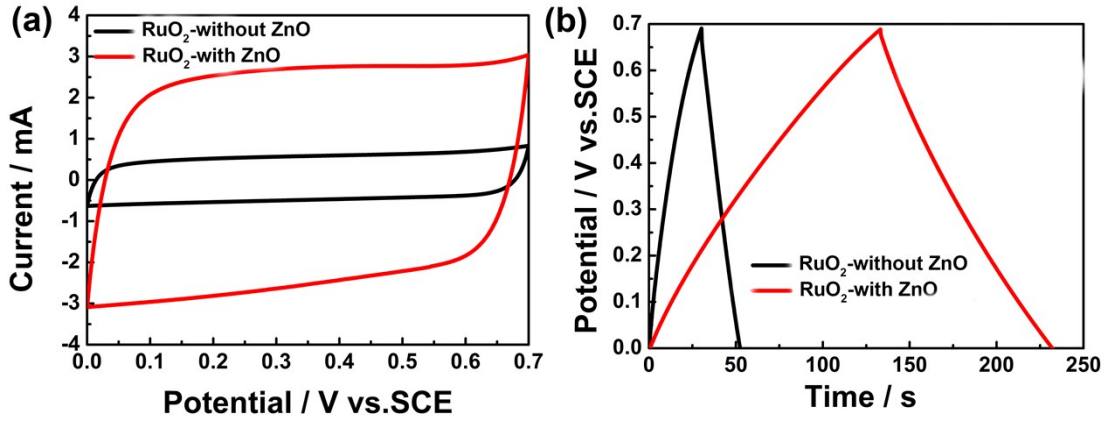


Figure S7. Electrochemical properties comparison of RuO<sub>2</sub> without ZnO as template and RuO<sub>2</sub>-12 electrode.

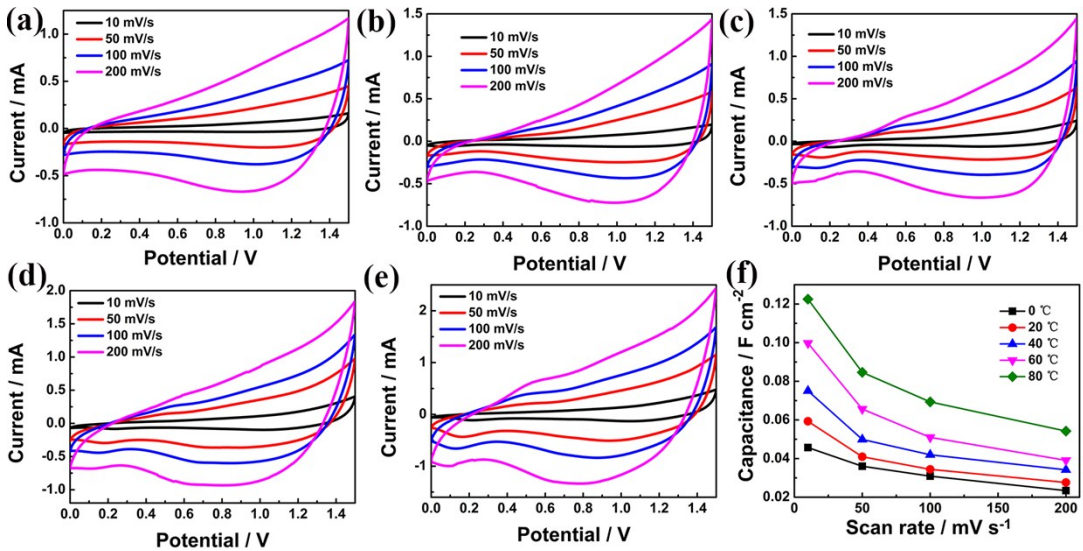


Figure S8. (a-e) CV curves for ASC device under 0, 20, 40, 60 and 80 °C, respectively. (f) Capacitance comparison at different temperatures based on CV curves.