

Supplementary Information for

CN Foam Loaded with Few-layer Graphene Nanosheets for High-performance Supercapacitor Electrode

Guoxing Zhu,^{a,c,*} Chunyan Xi,^a Yuanjun Liu,^b Jun Zhu,^a and Xiaoping Shen^{a,*}

^a*School of Chemistry and Chemical Engineering, Jiangsu University, Zhenjiang 212013, P. R.*

China, Fax: (+86)511-88791800; Tel: (+86)511-88791800; E-mail: zhuguoxing@ujs.edu.cn;

xiaopingshen@163.com.

^b*School of Environmental and Chemical Engineering, Jiangsu University of Science and*

Technology, Zhenjiang 212013, P. R. China.

^c*State Key Laboratory of Coordination Chemistry, Nanjing National Laboratory of*

Microstructures, Nanjing University, Nanjing, 210093, P. R. China.

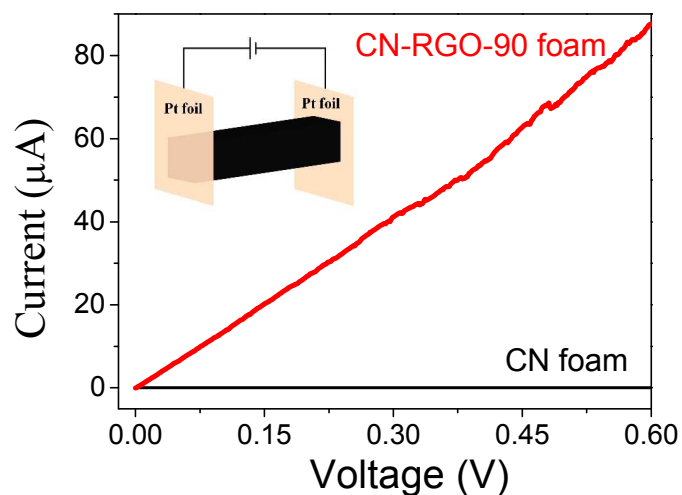


Fig. SI-1 Current-voltage curves measured on pristine CN and CN-RGO-90 foams with the same size. The inset shows the measure illustration. It can be seen that with the same voltage, CN-RGO-90 foam show much higher current, suggesting its high conductivity.

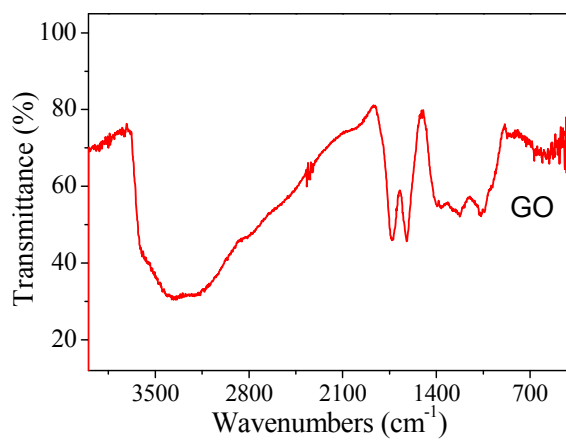


Fig. SI-2 FT-IR spectrum for graphite oxide (GO).

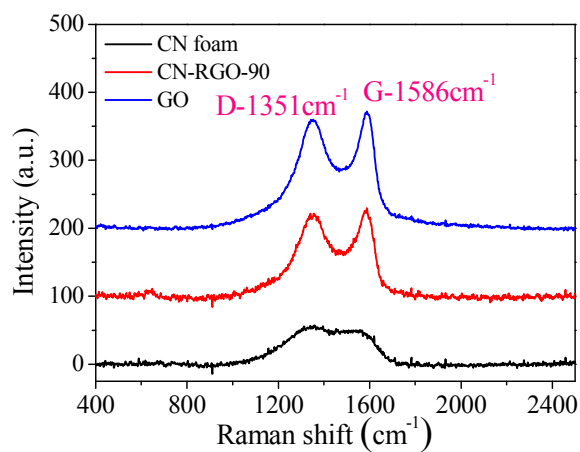


Fig. SI-3 Raman spectra of pristine CN foam (300 °C), CN-RGO-90 and GO.

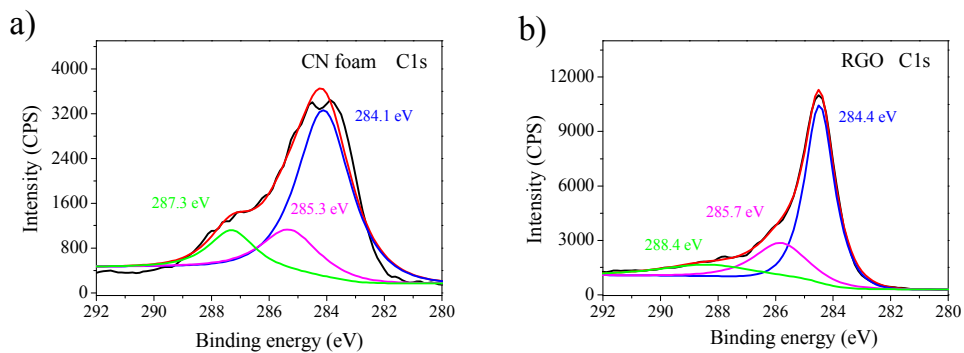


Fig. SI-4 Detailed XPS spectra for C 1s: a) pristine CN foam (300 °C) and b) pure RGO (300 °C).

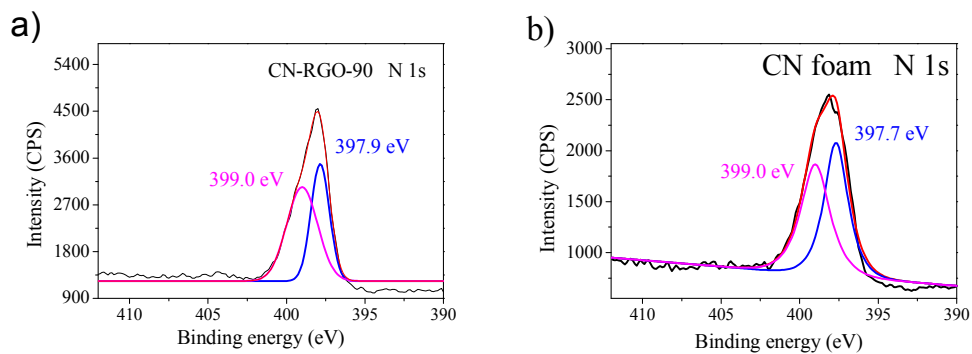


Fig. SI-5 Detailed XPS spectra for N 1s: a) CN-RGO-90 and b) pristine CN foam (300 °C).

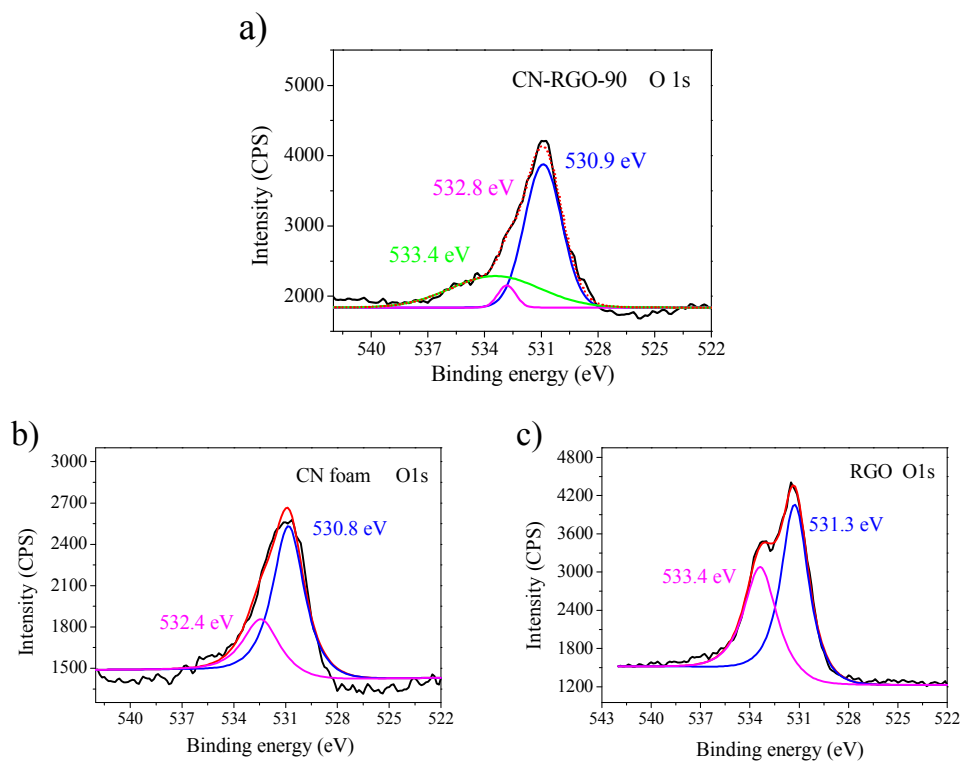


Fig. SI-6 Detailed XPS spectra for O 1s: a) CN-RGO-90, b) pristine CN foam (300 °C), and c) pure RGO (300 °C).

Table SI-1 Element analysis and XPS quantity analysis results for the prepared samples.

Samples	Annealing temperature	Composition calculated from element analysis	Composition calculated from XPS results
CN-RGO-6	300 °C	CN _{1.01} O _{0.14}	
CN-RGO-30	300 °C	CN _{1.05} O _{0.16}	
CN-RGO-60	300 °C	CN _{0.79} O _{0.22}	
CN-RGO-90	300 °C	CN _{0.61} O _{0.26}	CN _{0.356} O _{0.236}
CN-RGO-90/500	500 °C	CN _{0.34} O _{0.015}	
CN-RGO-90/750	750 °C	CN _{0.12} O _{0.006}	
CN foam	300 °C	CN _{1.04} O _{0.1}	
CN foam	500 °C	CN _{0.71} O _{0.1}	
CN foam	750 °C	CN _{0.33} O _{0.02}	
RGO	300 °C	CO _{0.009}	
RGO	500 °C	CO _{0.004}	
RGO	750 °C	CO _{0.002}	
GO	/	CO _{0.92}	