

Electronic supplementary information

A novel approach of binary doping sulfur and nitrogen into graphene layers for enhancing electrochemical performances in supercapacitors

Xuesha Zhang ^a, Pengtao Yan ^a, Ruijun Zhang ^{a,*}, Kang Liu ^a, Yanyan Liu ^a, Ting Liu ^a, and Xiaoyu Wang^{a, b}

^a State Key Laboratory of Metastable Materials Science and Technology,

Yanshan University, Qinhuangdao 066004, China

^b North China University of science and technology, Tangshan 063009,

China

*Corresponding author. Tel: +86 335 8387598.

E-mail address: zhangrj@ysu.edu.cn (R. Zhang)

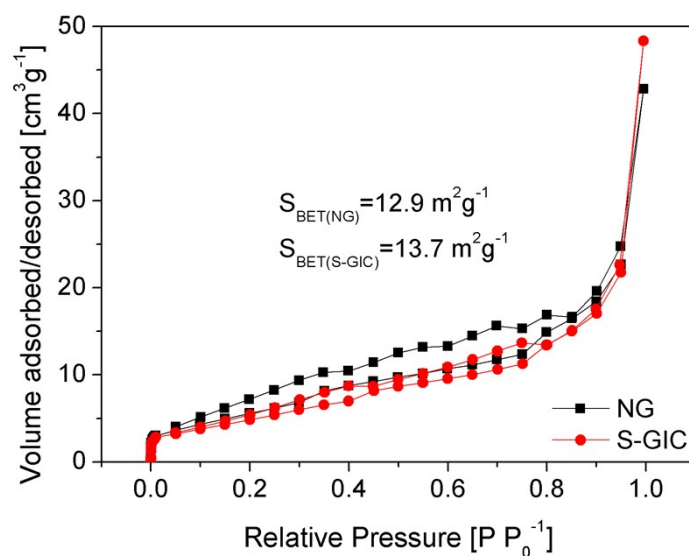


Figure S1 N₂ sorption isotherms of NG and S-GIC

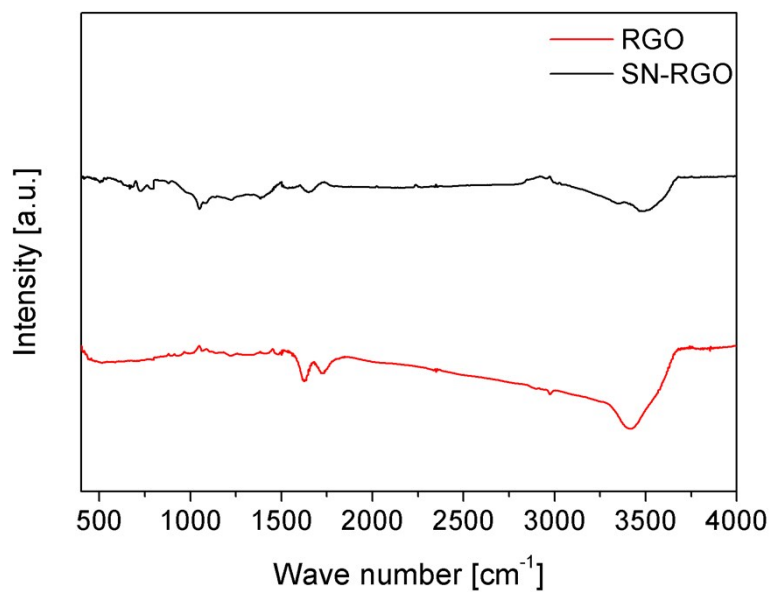


Figure S2 FTIR spectra of RGO and SN-RGO

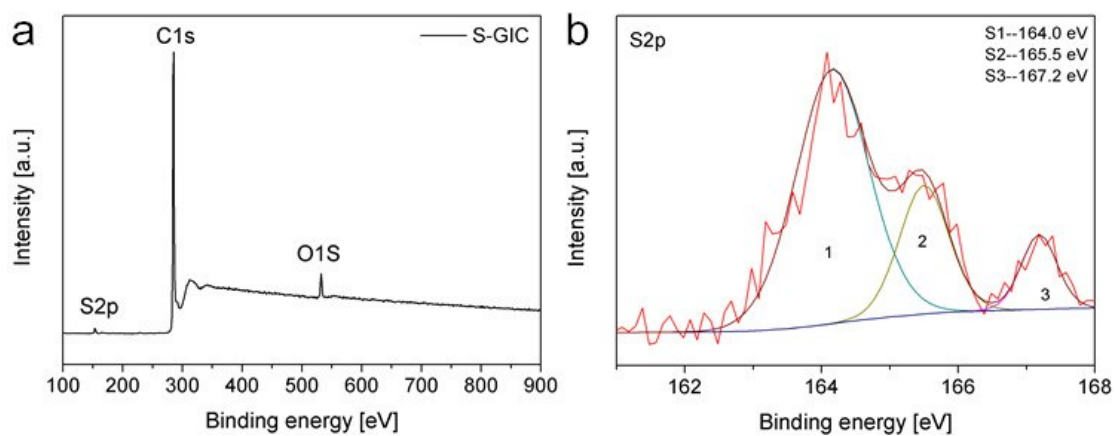


Figure S3 (a) XPS survey spectrum and (b) high resolution spectrum of S2p of S-GIC

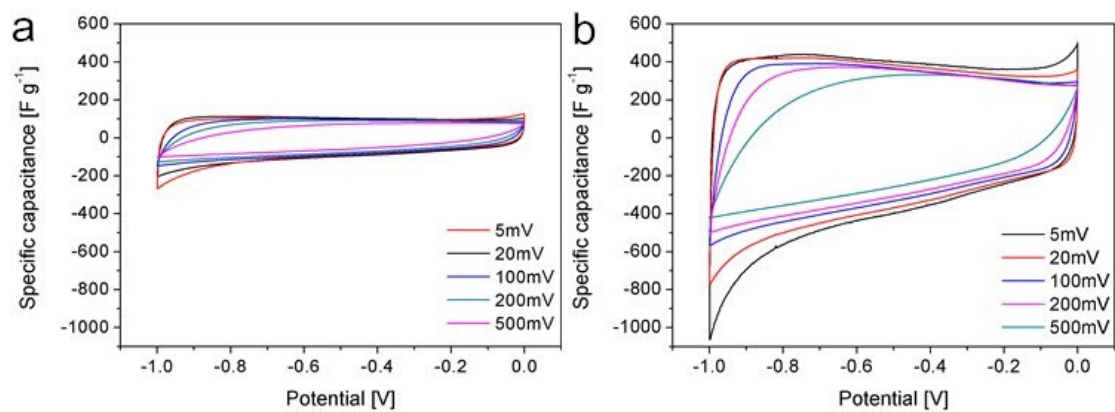


Figure S4 CV curves of (a) RGO and (b) SN-RGO at different scan rates ranging from 5 to 500 mV s^{-1}

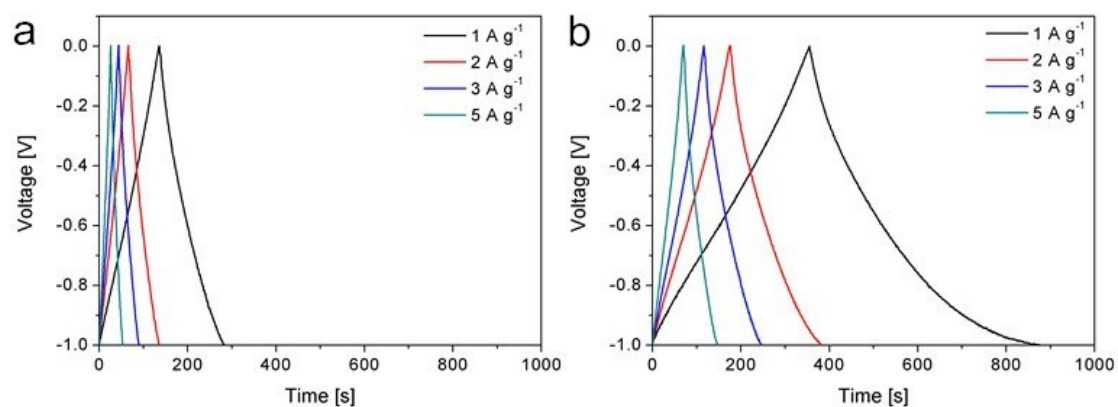


Figure S5 Galvanostatic charge/discharge curves of (a) RGO and (b) SN-RGO at various current densities