Supporting Information

Nitrogen-enriched Carbon Spheres Coupled with Graphitic Carbon

Nitride Nanosheets for High Performance Supercapacitors

Jun Zhu^a, Lirong Kong^a, Xiaoping Shen^{*, a}, Hu Zhou^b, Guoxing Zhu^a, Zhenyuan Ji^a,

Keqiang Xu^a, and Sayyar Ali Shah^a

^a School of Material Science and Engineering, School of Chemistry and Chemical

Engineering, Jiangsu University, Zhenjiang 212013, People's Republic of China

^b School of Material Science and Engineering, Jiangsu University of Science and Technology, Zhenjiang 212003, People's Republic of China.

* Corresponding author. Tel.: +86 511 88791800; Fax: +86 511 88791800 E-mail address: xiaopingshen@163.com (Xiaoping Shen)



Fig. S1. (a) XRD patterns of $g-C_3N_4$ (b) Raman spectra $g-C_3N_4$, g-CN, g g-CN/NCS-1, g-CN/NCS-2 and g-CN/NCS-3.



Fig. S2. XPS survey spectra of NCS, g-CN and g-CN/NCS-2.



Fig. S3. Electrochemical performances measured in a three-electrode system. (a-c) CV curves of g-CN, g-CN/NCS-1 and g-CN/NCS-3 at different scan rates.



Fig. S4. Electrochemical performances measured in a three-electrode system. Chargedischarge curves of g-CN/NCS-1, g-CN/NCS-3 g-CN/NCS-4, g-CN/NCS-5 at different current densities.



Fig. S5. Electrochemical performances measured in a 2032 coin-type system. (a) Test model of 2032 coin-type system. (b-c) Charge-discharge curves of NCS and g-CN at different current densities. (d) Charge-discharge curves of NCS, g-CN and g-CN/NCS-2 at the current density of 0.1 A g^{-1} .

	Carbon At. %	Nitrogen At. %	Oxide At. %
NGG	07.05	0.65	4.2
NCS	87.05	8.65	4.3
g-CN	53.4	44.75	1.85
g-CN/NCS-2	59.48	38.34	2.17

Table S1. The ratio of different elements of NCS, g-CN and g-CN/NCS-2.