Electronic Supplementary Material (ESI) for New Journal of Chemistry. This journal is © The Royal Society of Chemistry and the Centre National de la Recherche Scientifique 2023

Honeycomb graphene-polyaniline nanocomposites as novel electrode materials for high-performance supercapacitors

Haiyang Fu^{1,2}, Bo Gao^{1*}, Jiahao Li¹, Zhuang Liu¹, Qihao Yin¹, Ali Reza Kamali^{2,3*}
1.Key Laboratory for Ecological Metallurgy of Multimetallic Mineral, Ministry of Education, Northeastern University, Shenyang 110819, P.R.China
2.Energy and Environmental Materials Research Centre (E²MC), School of Metallurgy, Northeastern University, Shenyang, 110819, China
3.Department of Materials Science and Metallurgy, University of Cambridge, 27 Charles Babbage Road, Cambridge CB3 0FS
E-mail address: gaob@smm.neu.edu.cn (B. Gao); ali@smm.neu.edu.cn; a,r.kamali@cantab.net (A.R. Kamali)

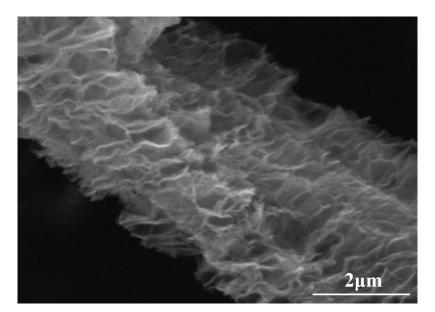


Fig. S1 FESEM micrograph of HG

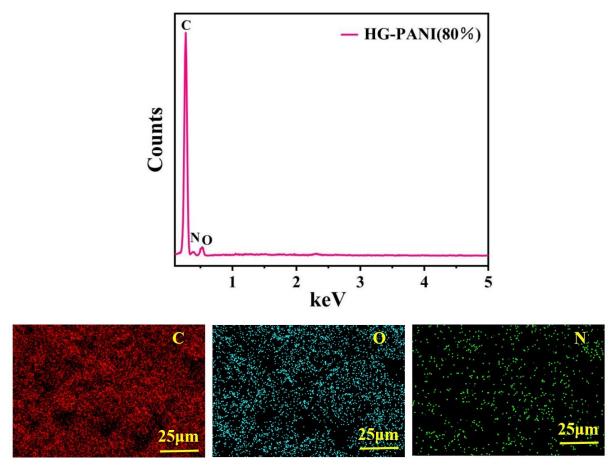


Fig.S2 EDS spectrum and EDS-mapping of HG-PANI (80%)

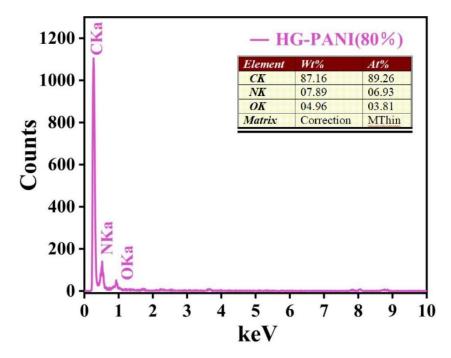


Fig.S3 Energy spectrum analysis of selected area in HG-PANI (80%)

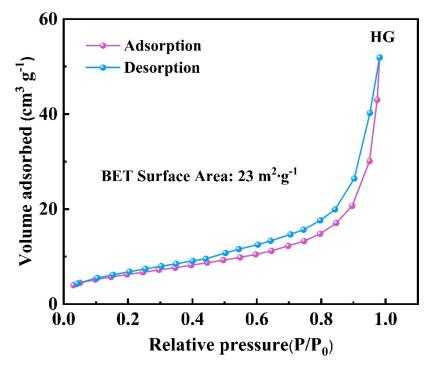


Fig. S4 N_2 adsorption/desorption isotherms of HG at 77K.

Table S1 The atomic percentage of C1s and O1s of HG-PANI (80%)

Sample	C 1s	N 1s	O 1s
HG-PANI (80%)	80.31 %	7.96 %	11.74 %

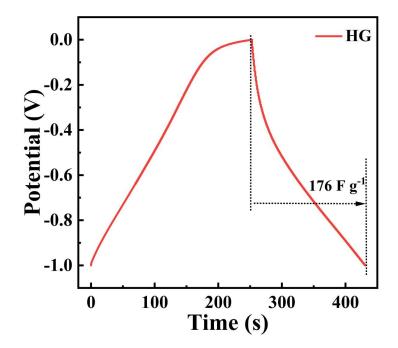


Fig. S5 GCD curves of HG at a current density of 1 $A \cdot g^{-1}$