

Supplementary Information

Preparation of N, P co-doped activated carbon derived from the honeycomb as an electrode material for supercapacitors

Yan Yan, †^{a,b} Mengjiao Xu, †^{a,b} Yuqing Luo, ^{a,b} Jingyi Ma, ^{a,b} Huan Pang^{a,b} and Huaiguo Xue*^{a,b}*

a. School of Chemistry and Chemical Engineering, Yangzhou University, Yangzhou, 225002, Jiangsu, P. R. China

b. Institute for Innovative Materials and Energy, Yangzhou University, Yangzhou, 225002, Jiangsu, P. R. China

*Email: huanpangchem@hotmail.com; panghuan@yzu.edu.cn; chhgxue@yzu.edu.cn

† These authors contributed equally to this paper.

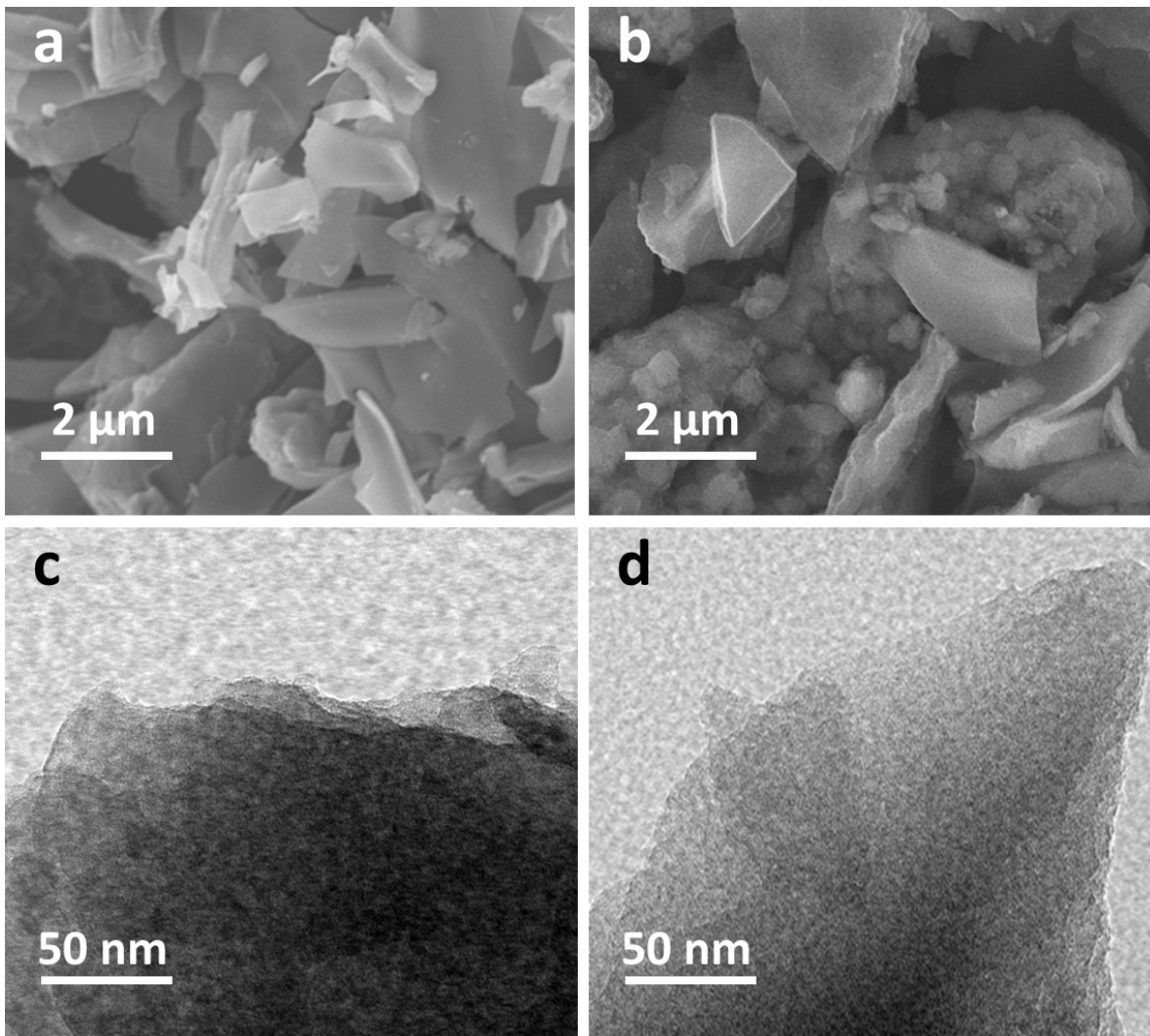


Figure S1. FESEM images of (a) A-400 and (b) A-900; (c) HRTEM images of (a) A-400 and (b) A-900.

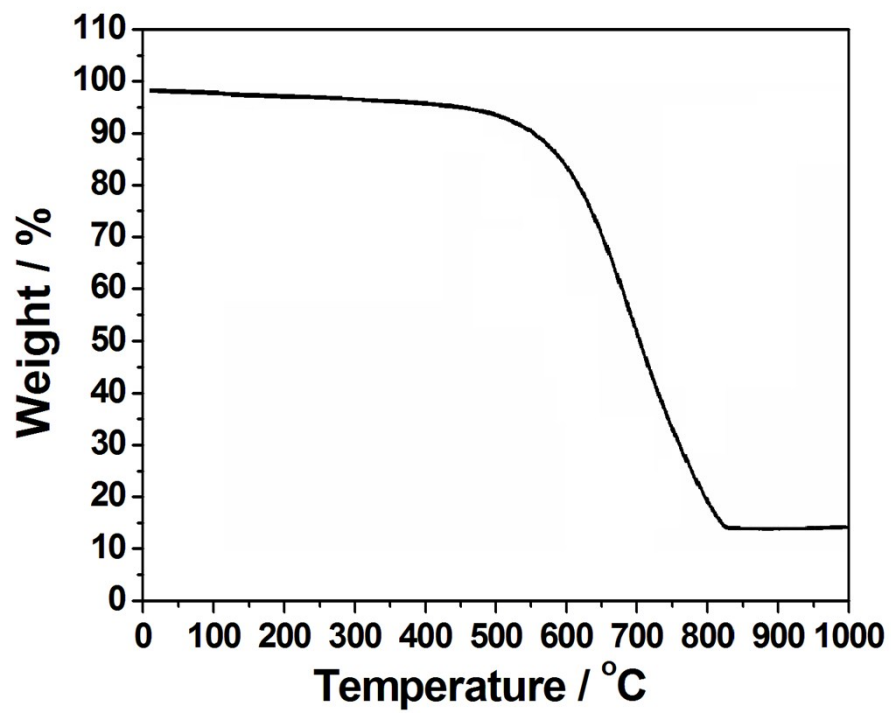


Figure S2. TGA curve of the honeycomb.

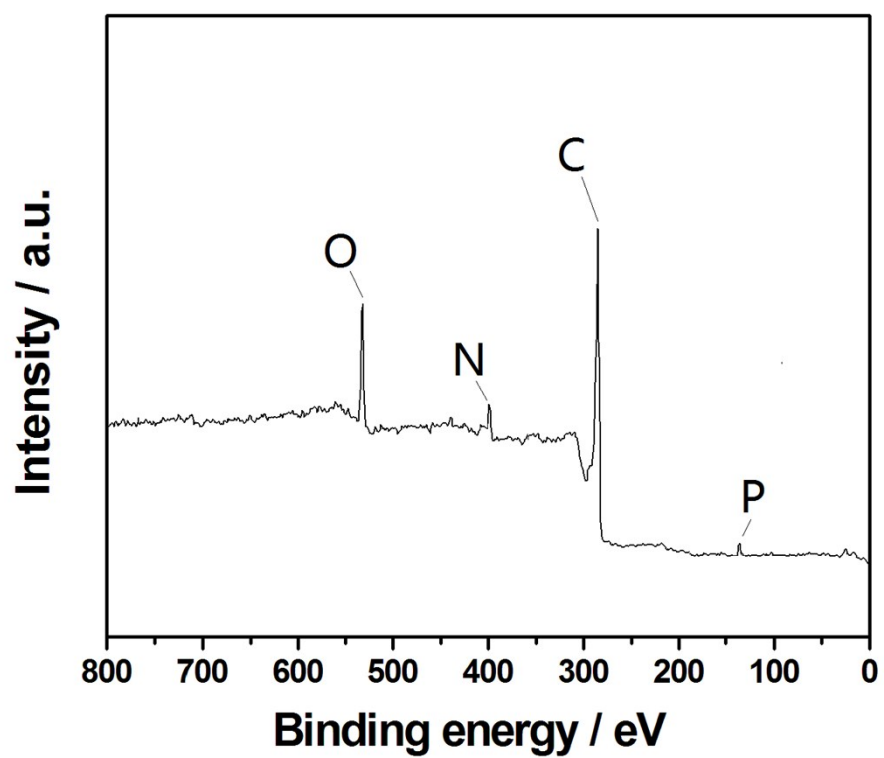


Figure S3. Survey spectrum of the honeycomb.

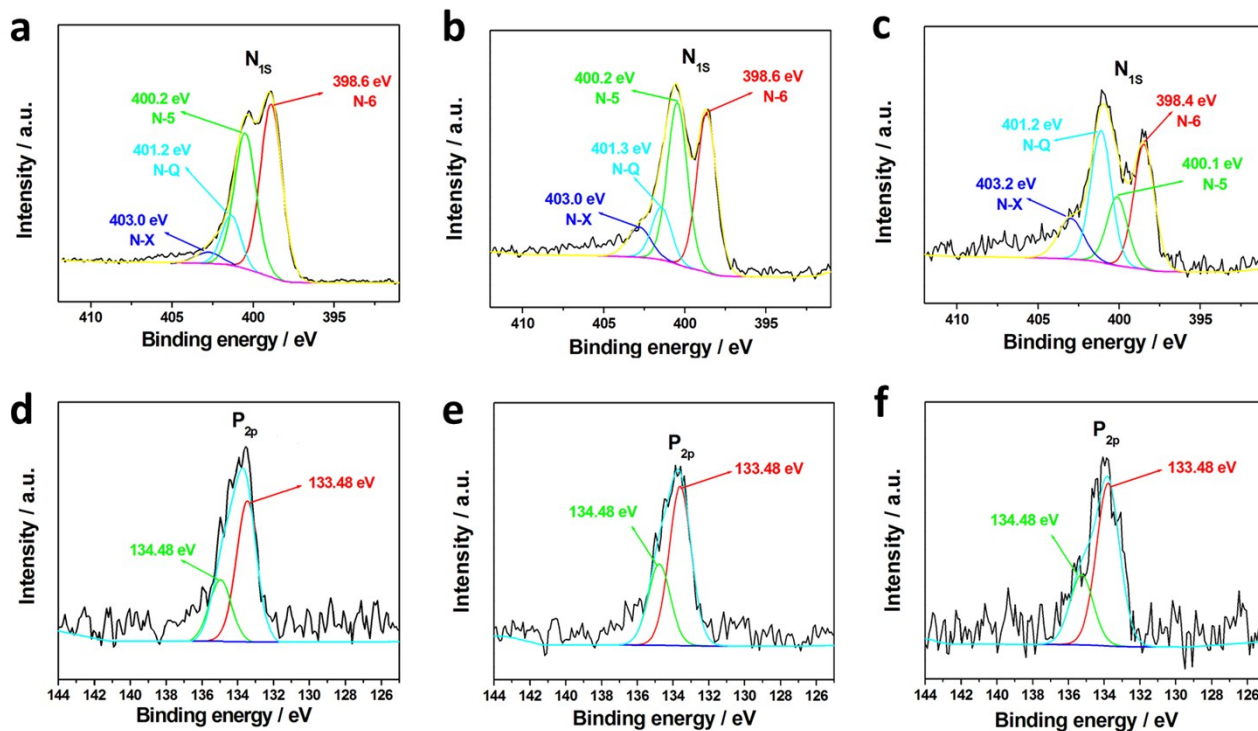


Figure S4. N_{1s} (a, b, c) and P_{2p} (d, e, f) XPS spectra of A-400, A-900, HA-900.

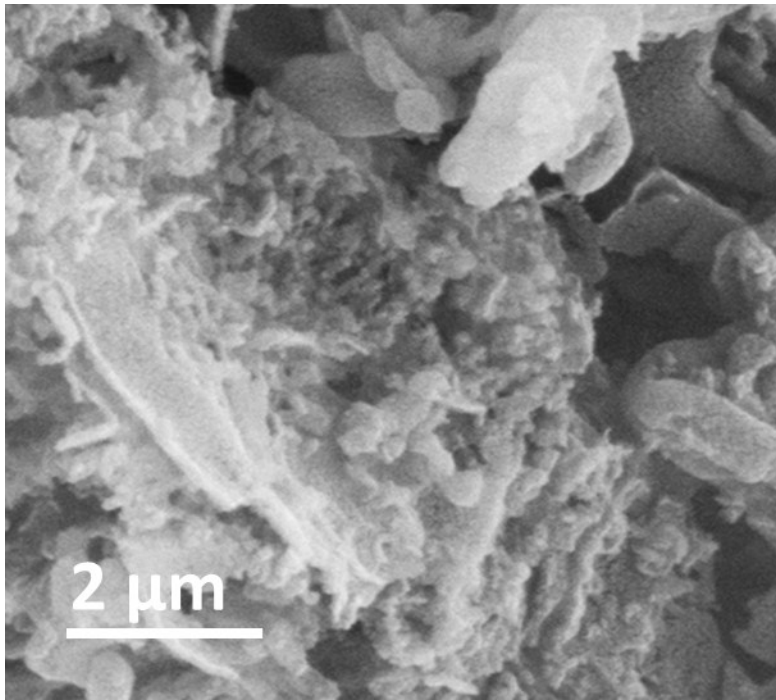


Figure S5. The FESEM image of the samples obtained after the 10000 cycle life testing..

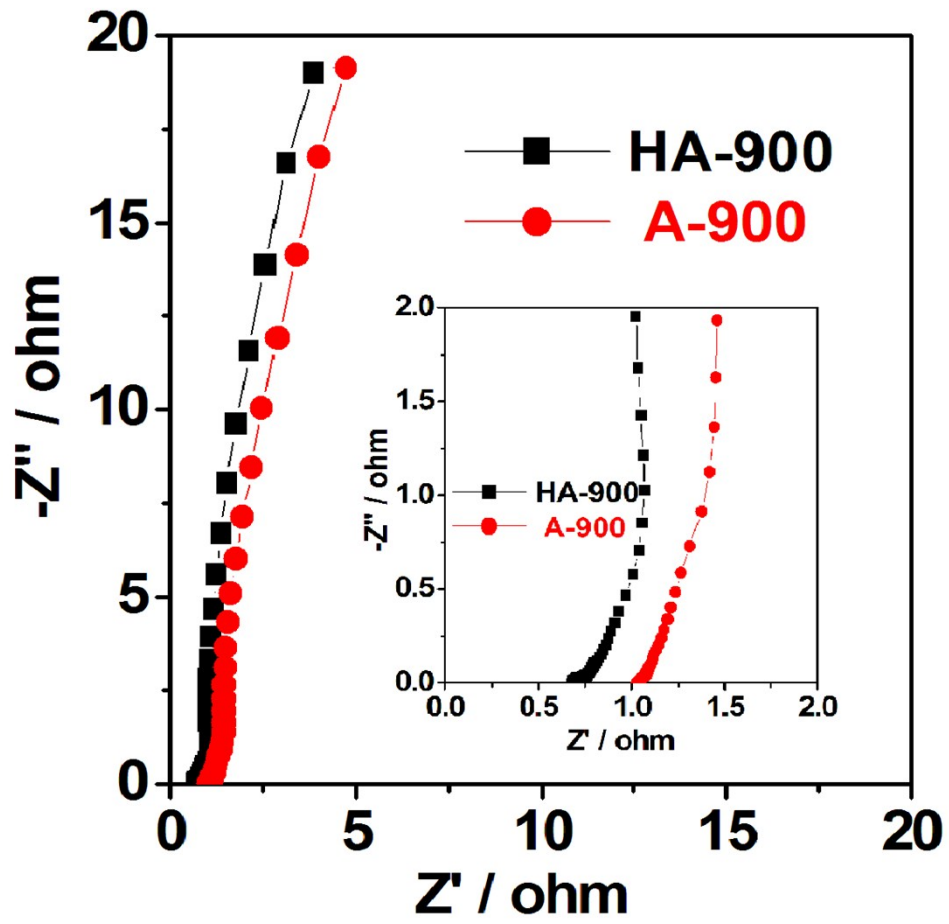


Figure S6. The electrochemical impedance spectra (EIS) of HA-900 and A-900 electrodes.

XPS composition (at%)				
Samples	C%	O%	N%	P%
honeycomb	53.13	36.69	7.58	1.25
A-400	69.28	14.63	13.12	2.97
A-900	78.75	11.74	8.15	1.36
HA-900	79.03	10.77	8.75	1.45

Table S1. Detailed XPS Analysis of the Samples