Electronic Supplementary Material (ESI) for RSC Advances.

Supporting Information

Facile one-step synthesis of highly graphitized hierarchical porous carbon nanosheets with large surface area and high capacity for Lithium storage

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Table S1

Property comparison of our materials with the materials reported in literature

Sample ID	Temperature (°C)	Catalyst	Surface area (m^2/g)	I_D/I_G [a]	Reference
HPCS-Fe/Zn-700	700	Fe	1815	0.62	
HPCS- Fe/Zn-850	850	Fe	2109	0.48	This work
HPCS- Fe/Zn-1000	1000	Fe	1461	0.40	
H fiber	950	Fe	350	-	1
PCNF	600	Fe	91	1.35	2
PMC-850	850	-	810	0.77	3
HPC-G-800	800	Ni	549	0.83	4
TCA1.5	350	-	1397.6	0.85	5
NGPC-1000-10	1000	-	932	0.90	6

[a] The intensity ratio of D band and G band (I_D/I_G) of Raman partially reflects the graphitization degree.

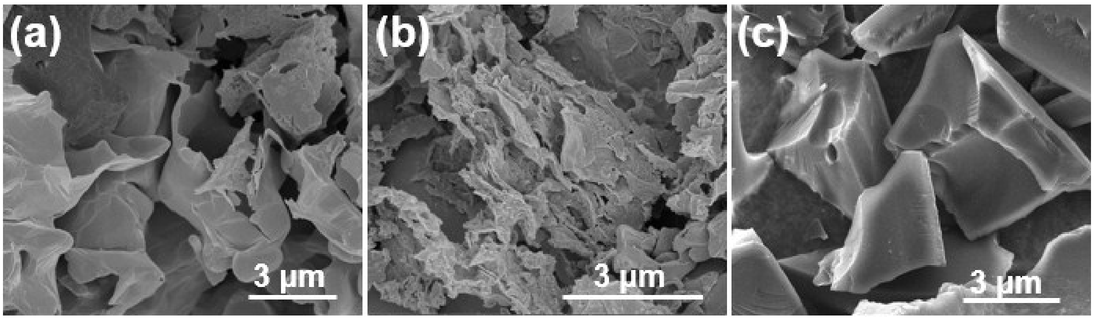

Fig. S1 SEM images of (a) HPCS-Fe/Zn-850, (b) HPCS-Fe-850 and (c) HPCS-Zn-850

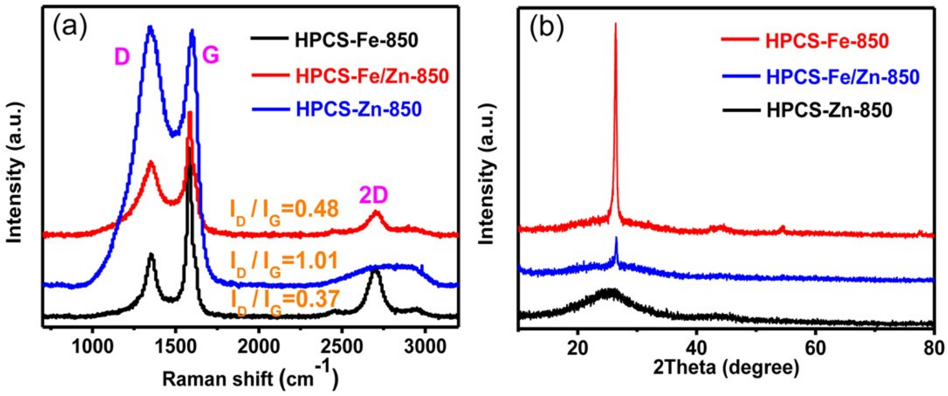

Fig. S2 Raman spectra (a) and XRD patterns (b) of HPCSs obtained using catalyst and activator or not.

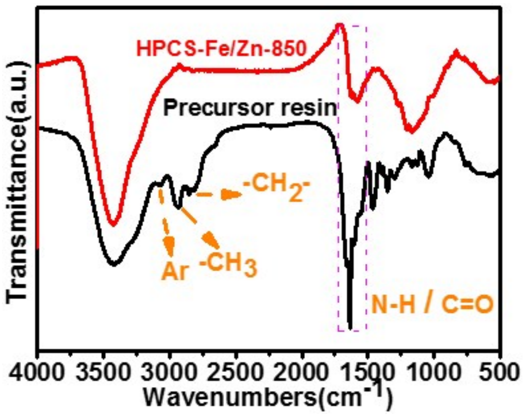

Fig. S3 FTIR spectrum of precursor resin and HPCS- Fe/Zn-850.

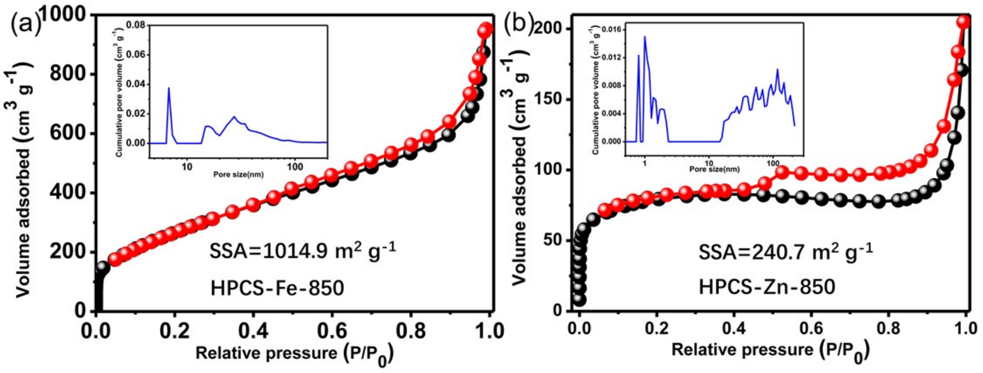

Fig. S4 N_2 adsorption-desorption isotherms and pore-size distribution curves of HPCS-Fe-850 (a) and HPCS-Zn-850 (b).

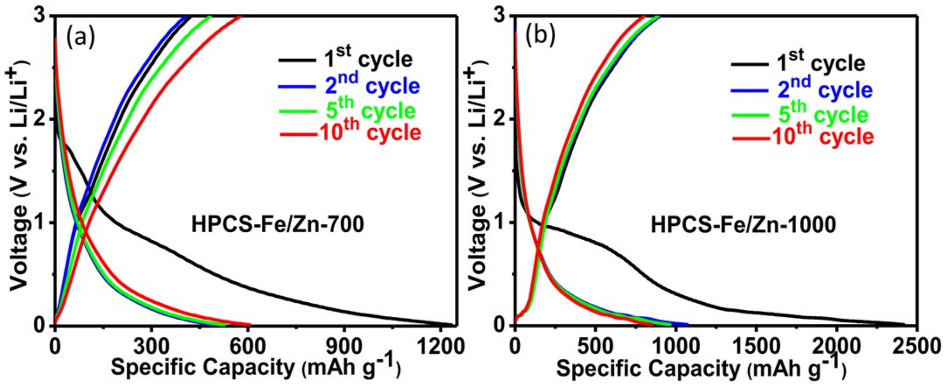

Fig. S5 Discharge/charge profiles of HPCS-Fe/Zn-700 (a) and HPCS-Fe/Zn-1000 (b).

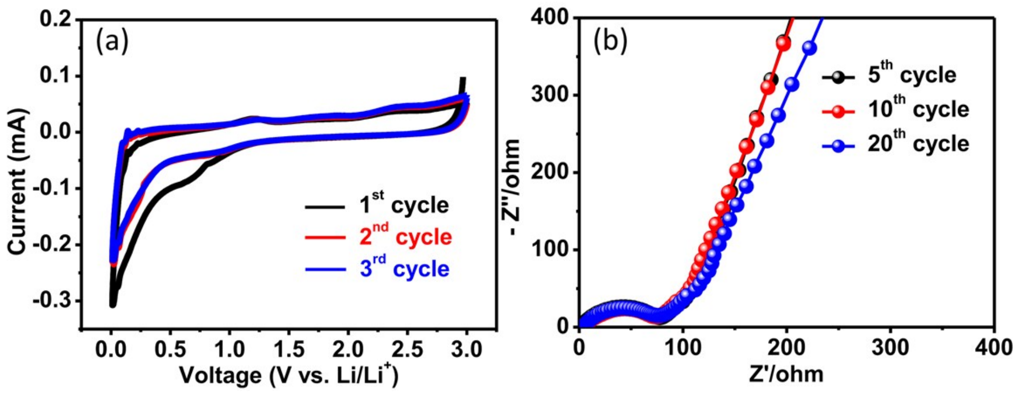

Fig. S6 (a) Cyclic voltammograms and (b) EIS results after several cycles (5, 10, 20 cycles) of HPCS-Fe/Zn-850.

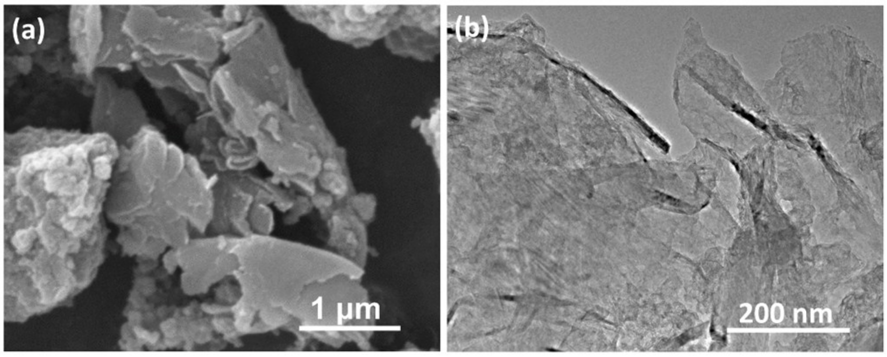

Fig. S7 SEM (a) and TEM (b) images of HPCS-Fe/Zn-850 after cycles.

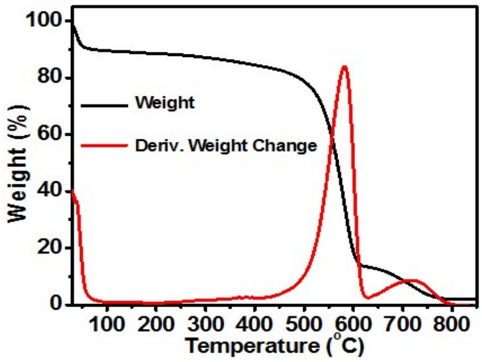

Fig. S8 Thermal gravimetric analysis of HPCS- Fe/Zn-850.

Reference:

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