

Supplementary Information

PANI-PEG copolymer modified LiFePO₄ as a cathode material for high-performance lithium ion batteries

Chunli Gong,^{a,b,c} Fangli Deng,^a Chi-Pong Tsui,^c Zhigang Xue,^{a,*} Yun Sheng Ye,^a Chak-Yin Tang,^{c,*} Xingping Zhou^a and Xiaolin Xie^a

^a Key Laboratory for Large-Format Battery Materials and Systems, Ministry of Education, School of Chemistry and Chemical Engineering, Huazhong University of Science and Technology, Wuhan 430074, China.

^b College of Chemistry and Material Science, Hubei Engineering University, Xiaogan 432100, Hubei, China.

^c Department of Industrial and Systems Engineering, The Hong Kong Polytechnic University, Hung Hom, Hong Kong, China.

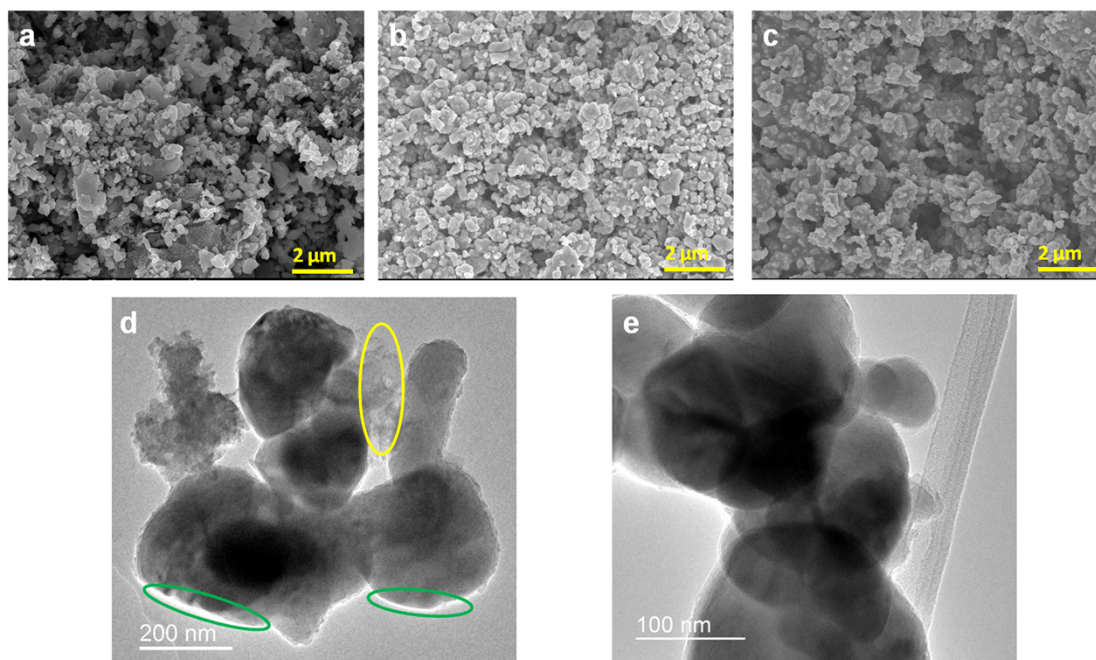


Fig. S1 SEM images of (a) cLFP, (b) cLFP/PANI and (c) cLFP/PANI-PEG, TEM images of (d) cLFP/PANI and (e) cLFP/PANI-PEG. The yellow ring in (d) represents dissociative polymer, and the green rings represent uncoated areas.

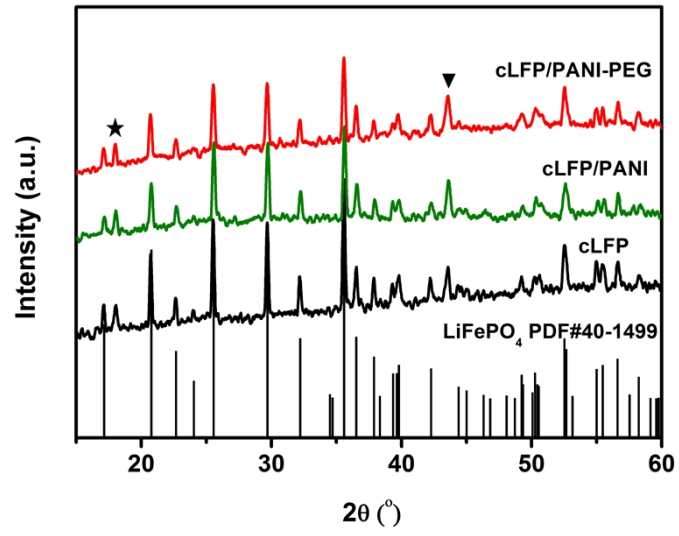


Fig. S2 XRD patterns of the cycled cLFP, cLFP/PANI and cLFP/PANI-PEG electrodes at 0.1C.