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Preparation of multifunctional P-CF@Mn_3O_4 composite used as structural anode materials

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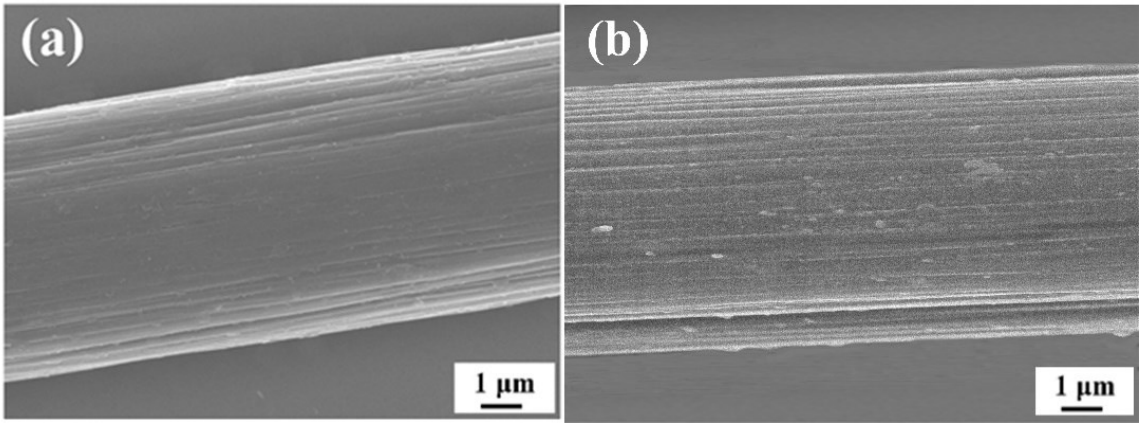

Fig. S1 The SEM images of (a) carbon fiber precursor and (b) carbon fiber after acid leaching and heat treatment at 8000× magnification.

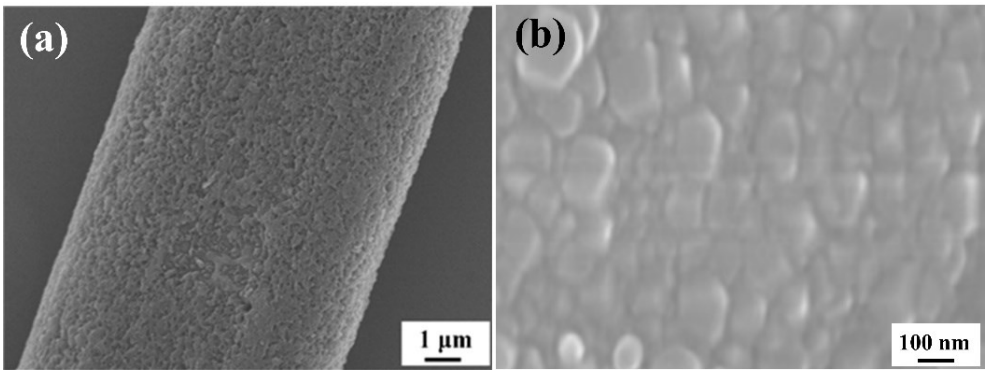

Fig. S2 The SEM images of CF@Mn_3O_4 composite at 5000× magnification and 50000× magnification.

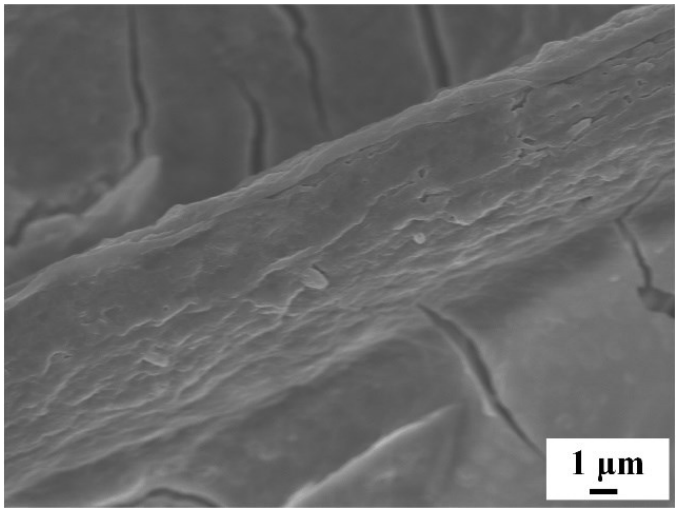

Fig. S3 The SEM image of CF@Mn_3O_4 composite after 150 cycles at a current density of 100 mA g^{-1}.

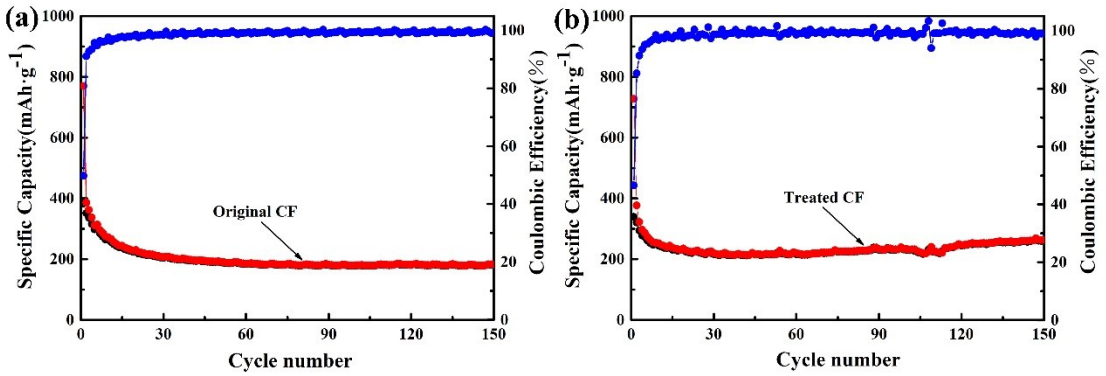

Fig. S4 The galvanostetic discharge capacities vs. cycle number curves of CFs and CF

acid leaching and heat treatment at a current density of 100 $mA \cdot g^{-1}$

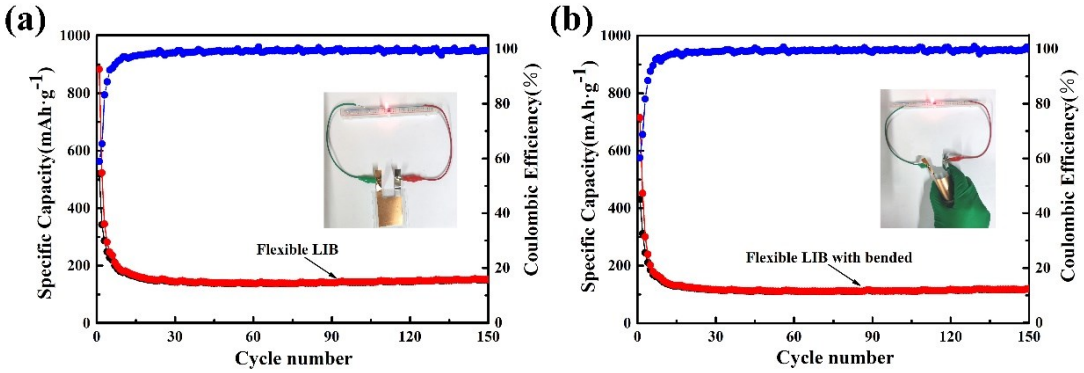

Fig. S5 The galvanostetic discharge capacities vs. cycle number curves of Flexible LIB and Flexible LIB with bended at a current density of 100 $mA \cdot g^{-1}$