Fe/Fe₃C@ graphitic carbon shell embedded in carbon nanotubes derived from Prussian blue as cathodes for Li-O₂ batteries

Yanqing Lai, Yifeng Jiao, Junxiao Song, Kai Zhang, Jie Li, Zhian Zhang*

School of Metallurgy and Environment, Central South University, Changsha Hunan 410083, China



Fig. S1 XRD pattern of dehydrated Na₄Fe(CN)₆.



Fig. S2 SEM image of dehydrated Na₄Fe(CN)₆.



Fig. S3 XRD pattern of Sample-800.



Fig. S4 TGA curves of Na₄Fe(CN)₆.



Fig. S5 Schematic diagram of the evaporation of sodium ions



Fig. S6 SEM images of pyrolysis anhydrous Na₄Fe(CN)₆ products at different temperatures, (a) 850 °C, (b) 900 °C, (c) 950 °C, and (d) 1000 °C.



Fig.S7. Raman spectra of the CNTs and DCNTs.



Fig.S8. TEM images of the (a) DCNTs and (b) CNTs.



Fig.S9. The discharge-charge curves at 0.1 mA cm⁻² current density with DCNTs

electrode.



Fig.S10. Cycling performances of DCNTs at 0.1 mA cm⁻¹ with a fixed specific

capacity of 500 mA h g⁻¹