## † Supplementary Information

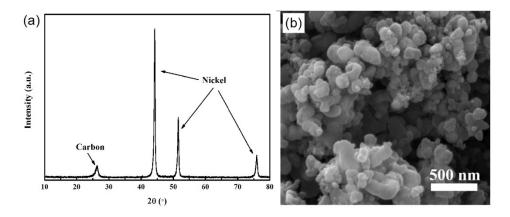
## Urchin-like $Ni_3ZnC_{0.7}$ -carbon nanotubes-porous carbon composite derived from metal-organic gel as a cathode material for rechargeable $Li-O_2$ batteries

Yanqing Lai, Wei Chen, Zhian Zhang\*, Yongqing Gan, Jie Li

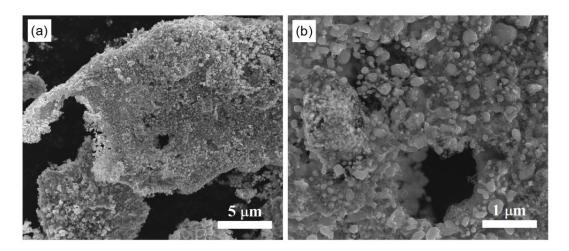
School of Metallurgy and Environment, Central South University, Changsha, Hunan, 410083,

China

Email: zhangzhian@csu.edu.cn; Tel: +86 731 88830649



**Fig. S1** (a) XRD pattern of NC composite that was synthesized by carbonizing the gel (MOG-N, which was prepared in the absence of Zn<sup>2+</sup>), (b) SEM image of NC



 $\begin{tabular}{ll} \textbf{Fig. S2} SEM images of NZCD composite that was synthesized by carbonizing the drying MOGNZ. \\ NZ. \\ \end{tabular}$