

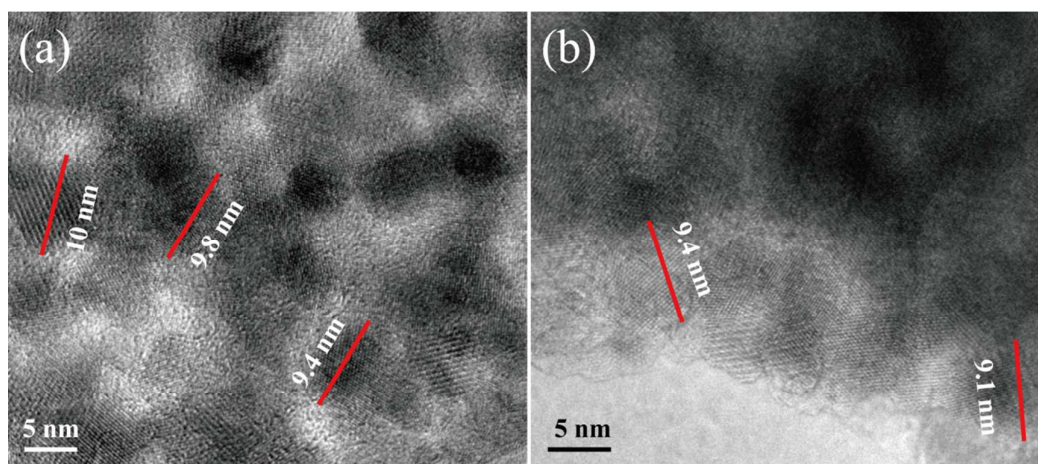
# Uniform Fe<sub>x</sub>Ni<sub>y</sub> nanospheres: Cost-effective electrocatalysts for non-aqueous rechargeable Li-O<sub>2</sub> batteries

Mengwei Yuan,<sup>a</sup> Caiyun Nan,<sup>a</sup> Yan Yang,<sup>a</sup> Genban Sun,<sup>\*,a, b</sup> Huifeng Li,<sup>\*,a</sup> and

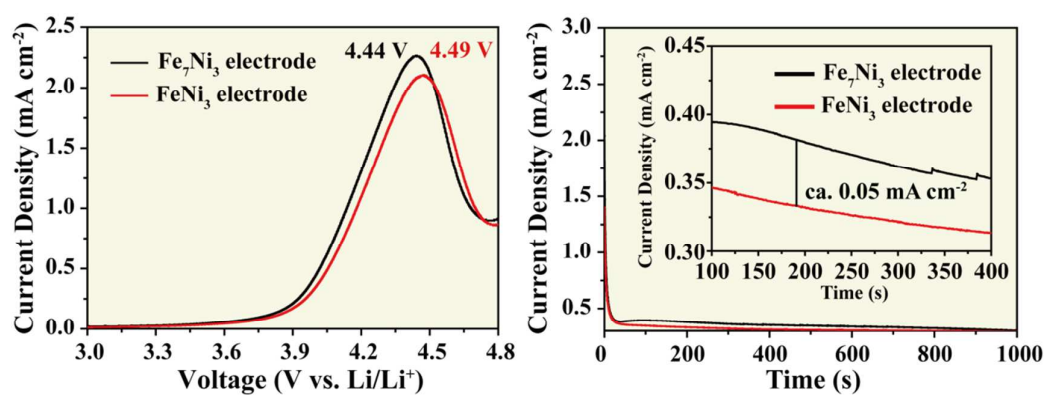
Shulan Ma<sup>\*,a</sup>

<sup>a</sup> Beijing Key Laboratory of Energy Conversion and Storage Materials and College of Chemistry, Beijing Normal University, Beijing 100875, China.

<sup>b</sup> Department of Materials Physics and Chemistry, University of Science and Technology Beijing, Beijing 100083, China.



**Figure S1** TEM images of  $\text{Fe}_7\text{Ni}_3$  (a) and  $\text{FeNi}_3$  (b) nanospheres in high magnification



**Figure S2** a) LSV and b) chronoamperometry profiles for the  $\text{Li}_2\text{O}_2$  containing cells catalyzed by  $\text{Fe}_7\text{Ni}_3$  and  $\text{FeNi}_3$ . The LSV profiles were tested at a sweep rate of  $2 \text{ mV s}^{-1}$ . The chronoamperometry profiles were tested at the potential of 4.0 V. The ratio of  $\text{Li}_2\text{O}_2$ ,  $\text{Fe}_x\text{Ni}_y$ , KB and binder was 2:2:1:1.