

Supplementary Information

MnO_x decorated CeO₂ nanorods as cathode catalyst for rechargeable lithium–air batteries

Yongqiang Zhu^{a,b}, Shanhu Liu^b, Chao Jin^{a, c*}, Shiyu Bie^a, Ruizhi Yang^{a*} and Jiao Wu^a

^a College of Physics, Optoelectronics and Energy & Collaborative Innovation Centre of Suzhou Nano Science and Technology, Soochow University, Suzhou 215006, China.

Corresponding Author E-mail: jinchao@suda.edu.cn (C. Jin); yangrz@suda.edu.cn (R. Yang)

^b Institute of Environmental and Analytical Sciences, College of Chemistry and Chemical Engineering, Henan University, Kaifeng 475004, China.

^c Key Laboratory of Fuel Cell Technology of Guangdong Province, South China University of Technology, Guangzhou 510640, China

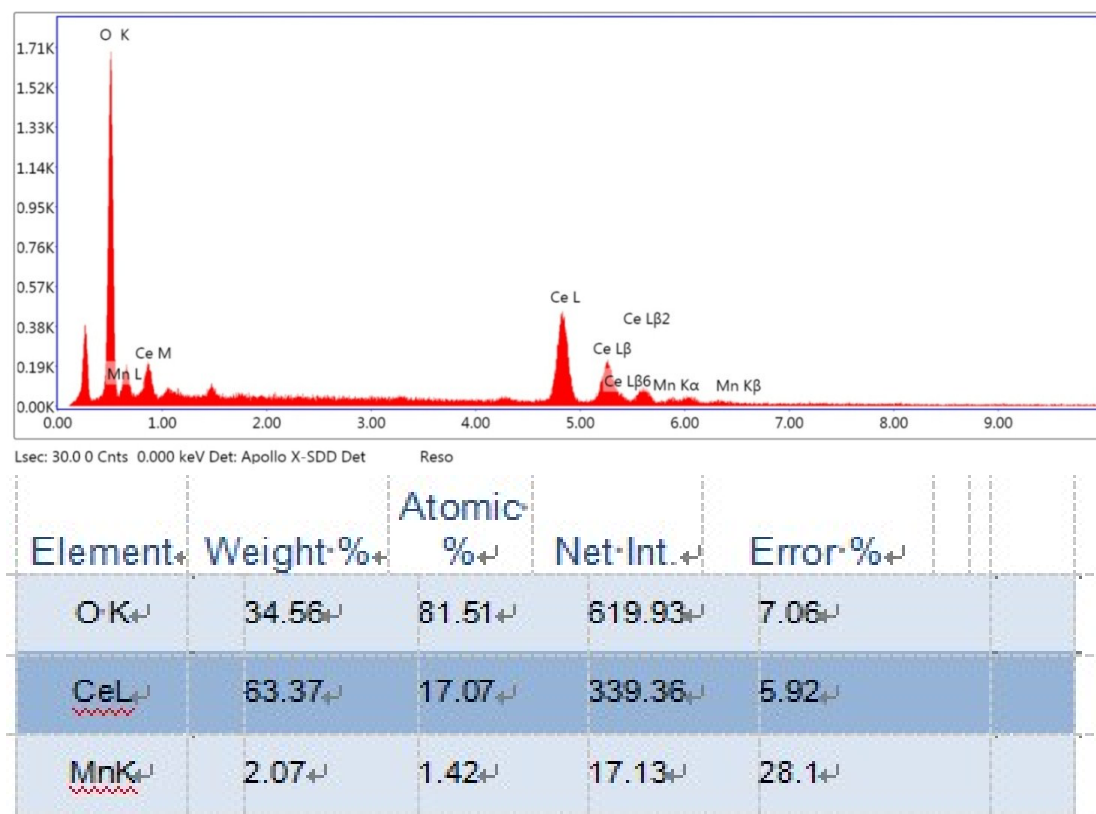


Figure S1†. EDS results of MnO_x@CeO₂ nanorods

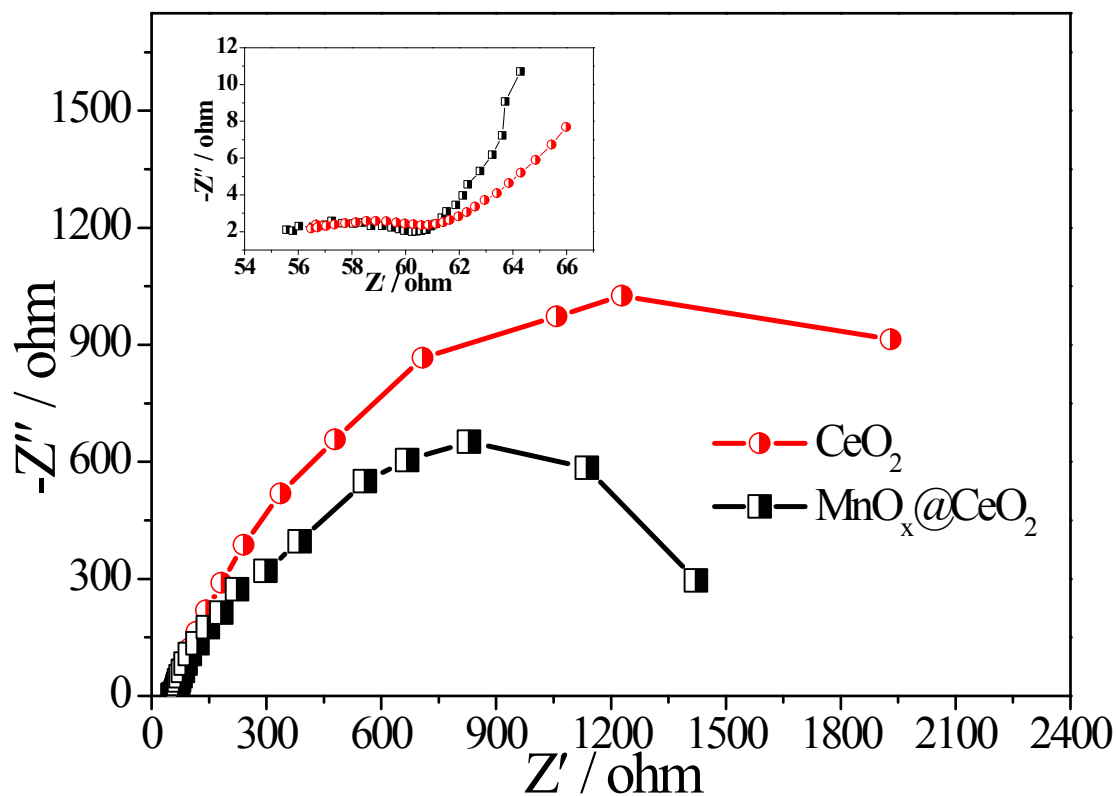


Figure S2[†]. Electrochemical impedance spectroscopy (EIS) of $\text{MnO}_x@\text{CeO}_2$ and CeO_2 nanorods electrocatalysts on GC electrode performed under O_2 saturated 0.1M KOH solution at -0.3 V (Vs. Ag/AgCl), respectively.

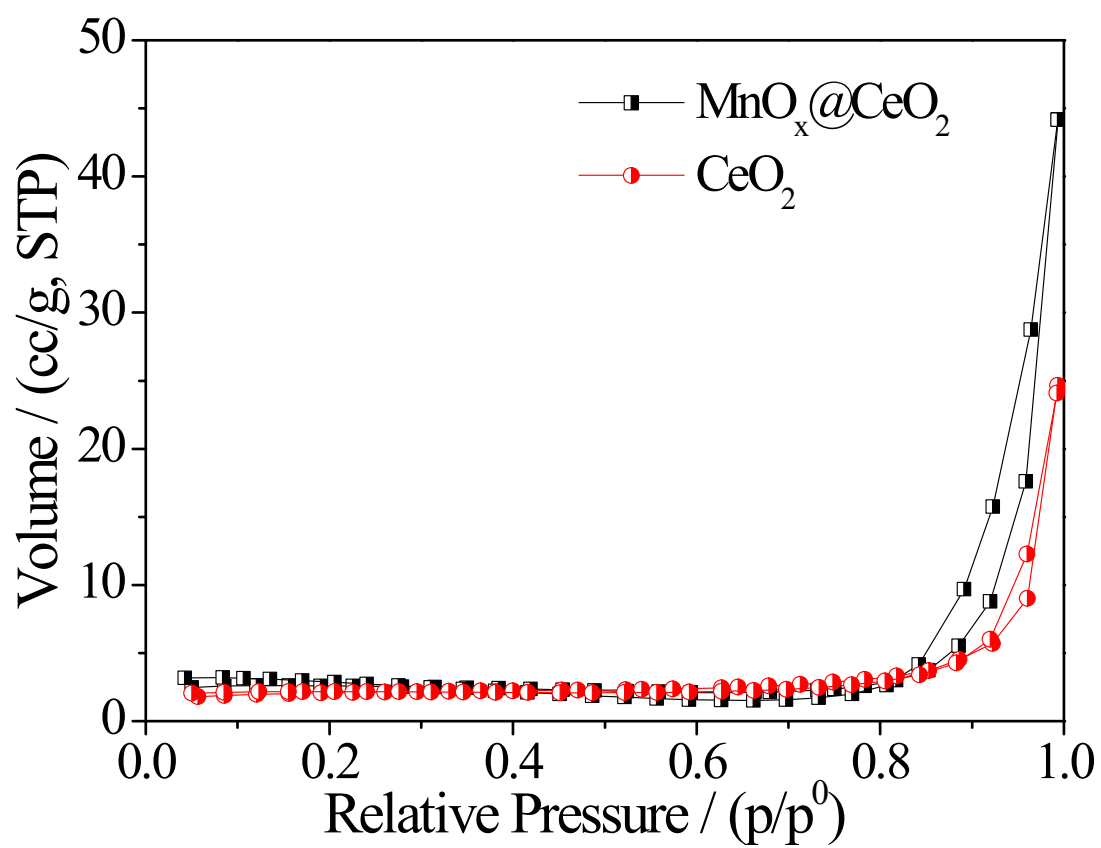


Figure S3[†]. N₂ adsorption–desorption isotherm plots of MnO_x@CeO₂ and CeO₂ nanorods, respectively.

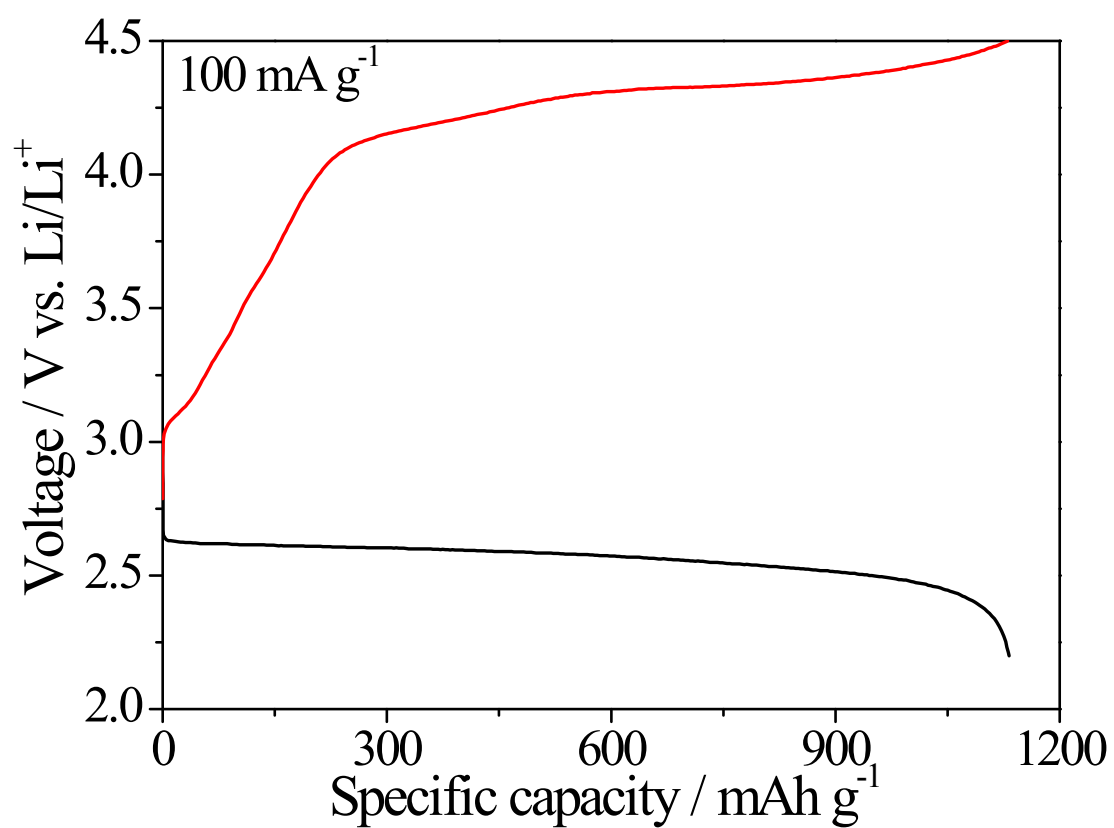


Figure S4[†]. Initial discharged/charged curves of commercial MnO₂-based lithium-air batteries at 100 mA g⁻¹.