Electronic Supplementary Material (ESI) for Journal of Materials Chemistry A.

Supporting Information

Oxygen Vacancies Promoting the Electrocatalytic Performance of the CeO_2 Nanorods as the Cathode Materials for Li-O_2 Batteries

Yue Hou,[a,‡] Jun Wang,[a,‡] Chuanxin Hou,[a] Yuqi Fan,[b] Yanjie Zhai,[a] Hongyu Li,[a] Feng Dang,[a*] Shulei Chou,[c*]

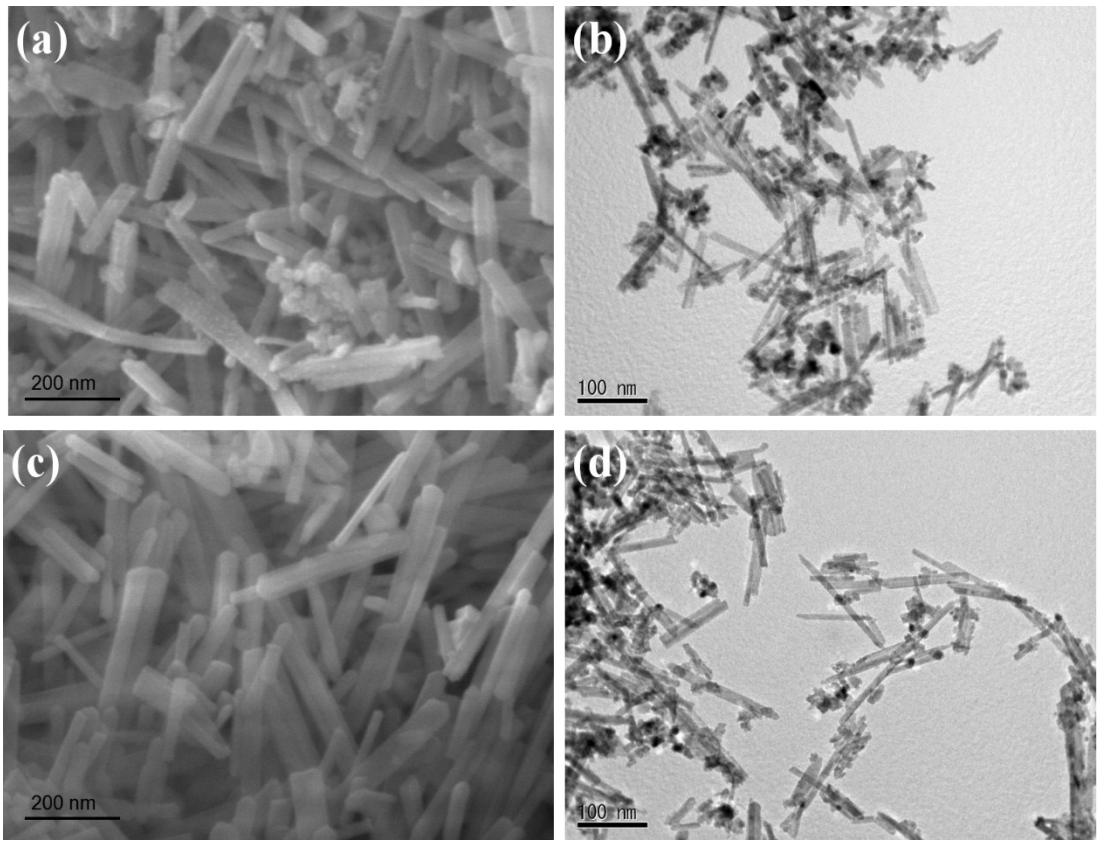

Figure S1. SEM and TEM images of Ce@120 nanorods**(a)-(b)**, and Ce@200 nanorods **(c)-(d)**.

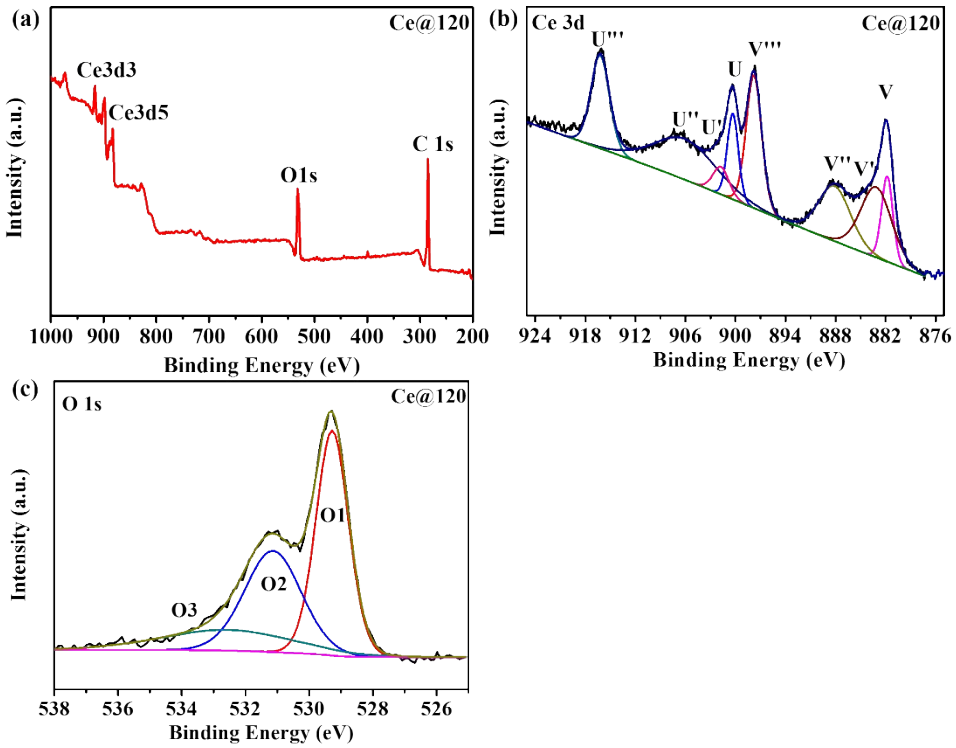

Figure S2. High-resolution XPS spectra of Ce@120 for survey curve**(a)**, Ce 3d**(b)** and O 1s**(c)**.

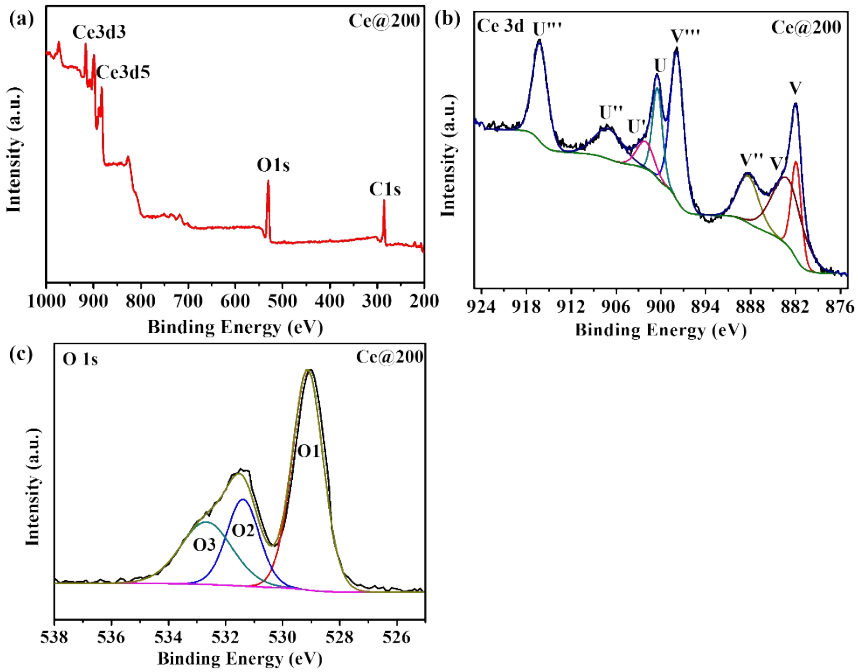

Figure S3. High-resolution XPS spectra of Ce@200 for survey curve**(a)**, Ce 3d**(b)** and O 1s**(c)**.

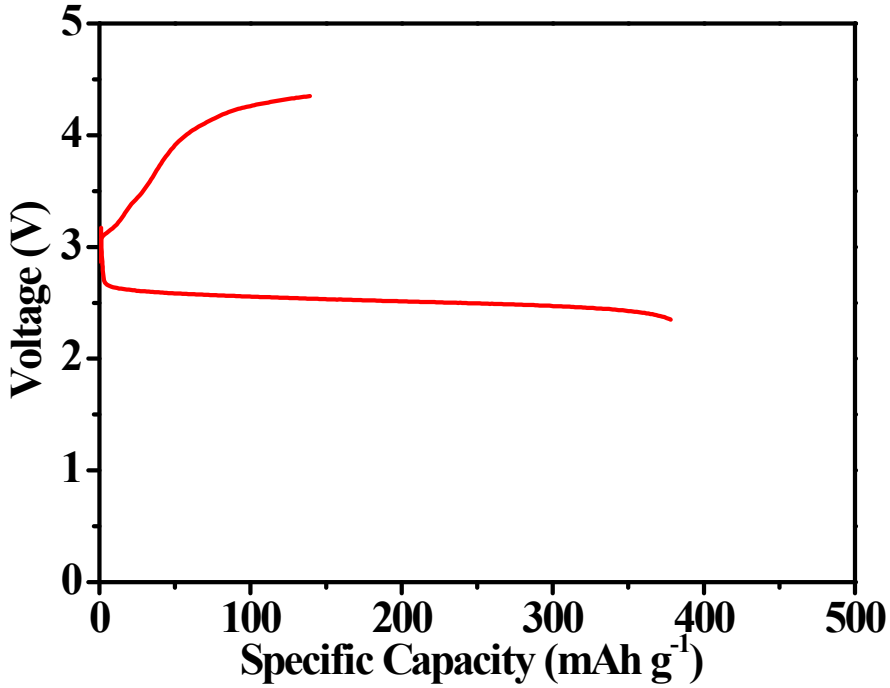

Figure S4. The initial discharge/charge profiles of the LOBs from 2.35 to 4.35 V for the pure carbon paper.

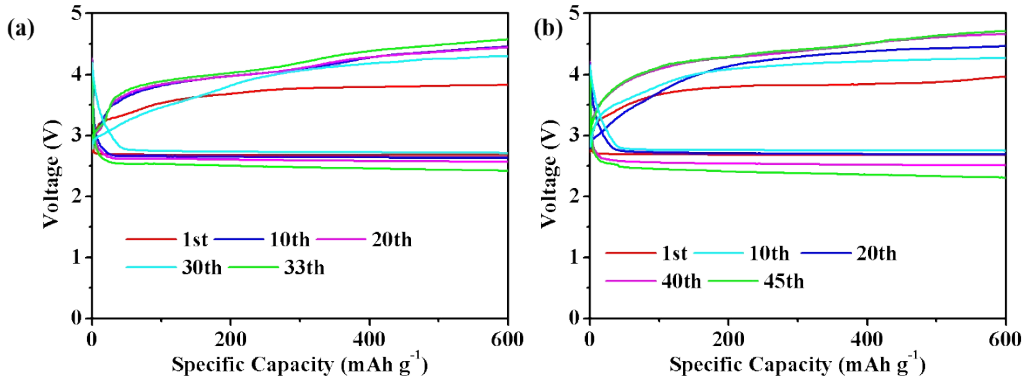

Figure S5. The corresponding typical discharge/charge profiles of the Ce@120 cathode**(a)** and the Ce@200 cathode**(b)** LOBs for selected cycles under a specific capacity limit of 600 mAh g^{-1} at 100 mA g^{-1}.