Electronic Supplementary Information (ESI)

Facile synthesis of partially oxidized Mn_3O_4-functionalized carbon cathodes for rechargeable Li–O_2 batteries

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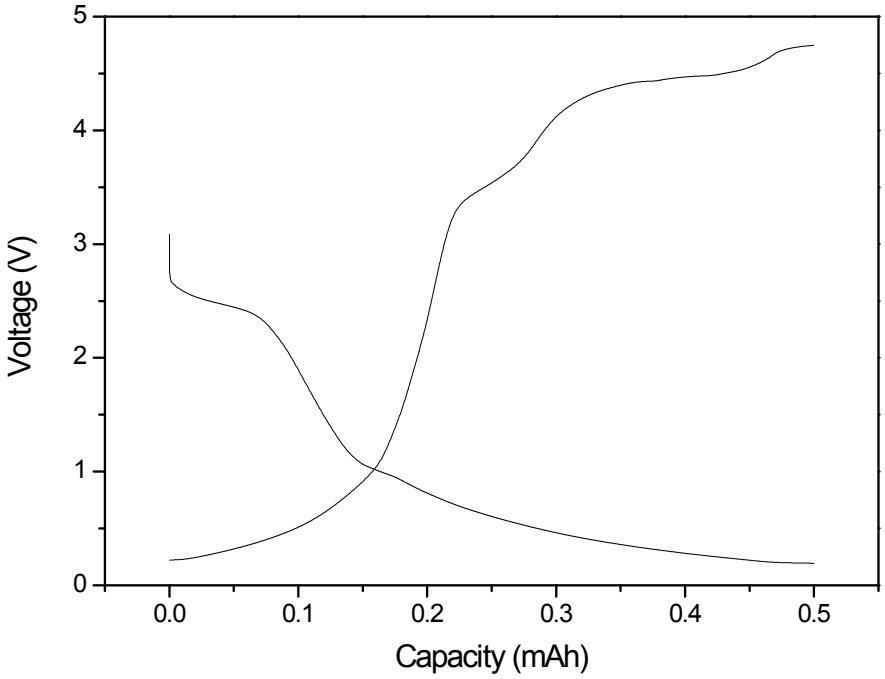

Figure S1. First discharge-charge profile of sample heated at 400 ℃. Sample preparation: Manganese (II) acetate tetrahydrate ($(CH_3COO)_2Mn{\cdot}4H_2O$-98%, Daejung) was dissolved in ethanol (99.9%, Daejung). Carbon paper (P50, AvCarb®) was dipped in manganese acetate solution and then dried. The manganese acetate-immersed P50 was then heated at 400 ℃ for 10h in air.

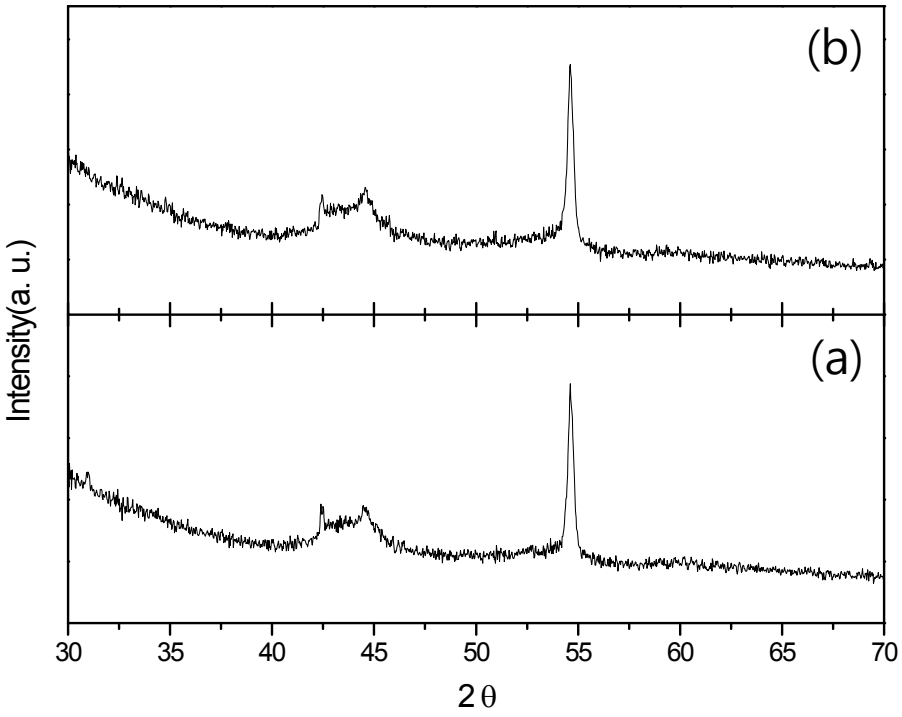

Figure S2. XRD patterns of (a) pristine P50 and (b) the sample heated at 300 ℃. Sample preparation: Manganese (Ⅱ) acetate tetrahydrate ($(CH_3COO)_2Mn{\cdot}4H_2O$-98%, Daejung) was dissolved in ethanol (99.9%, Daejung). Carbon paper (P50, AvCarb®) was dipped in manganese acetate solution and then dried. The manganese acetate-immersed P50 was heated at 300 ℃ for 10h in air.

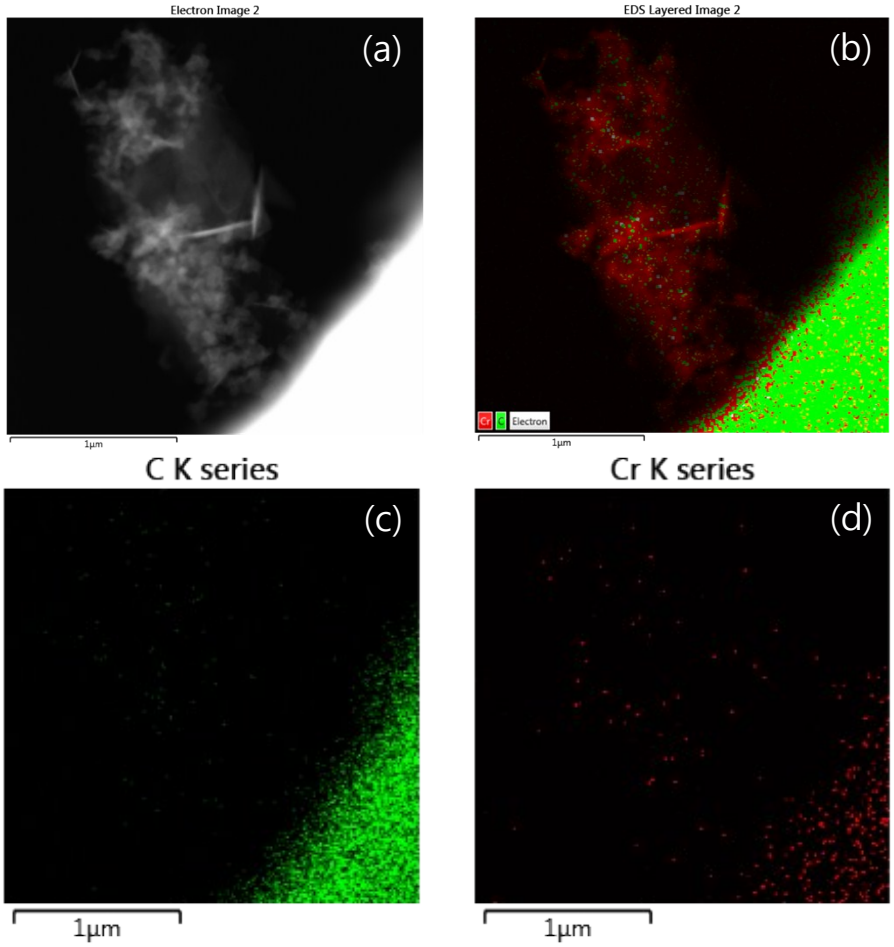

Figure S3. (a) Dark field and (b) elemental mapping images and corresponding elemental mapping images for (c) C and (d) Cr of the pristine P50