Electronic Supplementary Material (ESI) for New Journal of Chemistry. This journal is © The Royal Society of Chemistry 2015

Supporting Information

Large-scale controllable synthesis of micro/nano-structured

MnCo₂O₄ with multiporous core-shell architectures as

high-performance anode materials for lithium-ion batteries

Xiaoyu Wu, Songmei Li^{*}, Bo Wang, Jianhua Liu, Mei Yu

Key Laboratory of Aerospace Advanced Materials and Performance of Ministry of Education, School of Materials Science and Engineering, BeihangUniversity, Beijing, 100191, P. R. China

* Corresponding author. Tel: +86 10 82317103; fax: +86 10 82317103.E-mail address: songmei_li@buaa.edu.cn.



Fig. S1 XRD patterns of the various micro/nano-structured $MnCo_2O_4$



Fig. S2 SEM images of the various micro/nano-structured $MnCo_2O_4$ with broken shells



Fig. S3 (a, b) TEM and (c, d) HRTEM images of the MnCo₂O₄ microspheres



Fig. S4 EDS spectrum of the MnCo₂O₄ microspheres



Fig. S4 EDS line-scanning results of the MnCo₂O₄ products



Fig. S6 BJH pore size distributions of the MnCo₂O₄ microspheres



Fig. S7 Charge-discharge voltage profiles of the $MnCo_2O_4$ (a) microellipses, (b) microcubes, (c) twin microspheres electrodes at a current density of 400 mA g⁻¹



Fig. S8 SEM images of the $MnCo_2O_4$ microspheres (the insert is the magnified SEM image of the surface of the $MnCo_2O_4$ microspheres).