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

Supporting Information

$Li_4Ti_5O_{12}$ nanosheets as high-rate and long-life anode materials for

sodium-ion batteries

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Fig. S1 Representative powder XRD pattern and Rietveld refinement of LTO-RT. The orange line are experimental points, the dark points are the calculated pattern, and the purple line is the difference curve.



Fig. S2 Ex-situ XRD patterns of LTO-RT electrode materials during discharge/charge. (a) charge to 2.5 V. (b) charge to 0.95 V. (c) discharge to 0.3 V. (d) discharge to 0.75 V.



Fig. S3 Ex-situ XRD patterns of LTO electrode materials during

discharge/charge. (a) charge to 2.5 V. (b) charge to 0.95 V. (c) discharge to 0.3 V.

(d) discharge to 0.75 V.



Fig. S4 Ex-situ XRD patterns of LTO and LTO-RT electrode materials after 100 and 250 cycles of the Na insertion and extraction.



Fig. S5 (a), (b) SEM images of LTO and LTO-RT electrodes after 250 cycles of the Na insertion and extraction. (c), (d) TEM images of LTO and LTO-RT nanosheets after 250 cycles of the Na insertion and extraction.