## **Supporting Information for**

## Porous three-dimensional activated reduced graphene oxide as anode materials for lithium ion batteries

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## **Supporting figures**



Fig. S1 XRD pattern of (a) aMEGO-4, (b) GO, and (c) graphite.

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Fig. S2 Raman spectra of (a) aMEGO-4, (b) GO, and (c) graphite.



Fig. S3 (a) SEM images of the T-MEGO sample (SSA  $\sim 263 \text{ m}^2 \text{ g}^{-1}$ ) (a) at low-magnification, (b) at high-magnification.



Fig. S4 Electrochemical performance of T-MEGO (SSA ~ 263 m<sup>2</sup> g<sup>-1</sup>) sample in 1 M LiPF<sub>6</sub>/EC+DEC electrolyte in the potential of  $0.005 \sim 3.0$  V. (a) CV curve at the scan rate of 0.05 mV s<sup>-1</sup>. (b) The first discharge/charge curves at the current density of 100 mA g<sup>-1</sup>. (c) Cycling performance at the current density of 100 mA g<sup>-1</sup>. (d) The rate performance at various current densities.



Fig. S5 (a) Comparison of the first discharge/charge curves of the aMEGO samples with different specific surface areas. (b) Comparison of cycling performance of the aMEGO samples at the current density of 100 mA  $g^{-1}$ .