

Supporting Online Materials for

Effects of functional groups of graphene oxide on the electrochemical performance in lithium-ion batteries

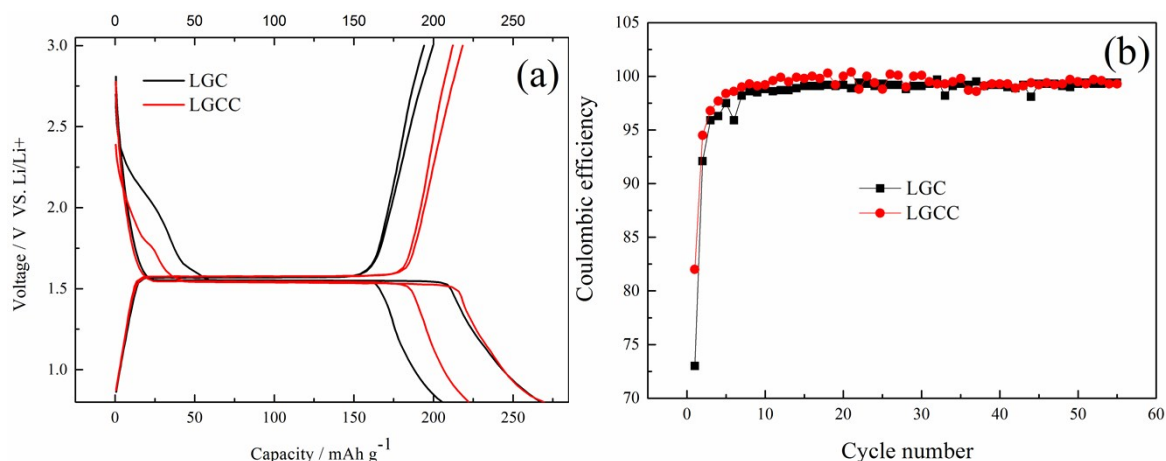
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Supplementary figures

Fig. S1 The (a) discharge/charge curves and (b) initial coulomb efficiency of the LGC and LGCC electrodes



Spinel Li₄Ti₅O₁₂ (LTO) has been investigated in recent years, however, the low specific capacity (175 mAh g⁻¹ for theoretical and 160 mAh g⁻¹ for actual) seriously hinder its large-scale application as high energy density and rate performance batteries. In our previous work¹, the LGC electrode was prepared and showed high capacity (200 mAh g⁻¹) than that of pure LTO. Utilizing the prepare GO-COOH instead the GO, the LGCC electrode was prepare and investigated. The specific capacity of LGCC electrode has been increased by 10% than that of LGC electrode (shown in Fig. S1a). And the initial

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coulomb efficiency has been also improved greatly, from 72% to 82% (shown in Fig. S1b).

References

S1 Z. W. Xie, X. Li, W. Li, M. Z. Chen and M. Z. Qu, *J. Power Sources*, 2015, 273, 754.