Support information

Intercalation and delamination of Ti₂SnC with high lithium ion storage capacity

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Figure S1. SEM image of Ti₂SnC raw material with EDS result.



Figure S2. XRD patterns of $n-Ti_2SnC$ at different voltages during the second discharge cycle.



Figure S3. galvanostatic charge/discharge curve of n-Ti₂SnC after 1000 cycles under different current densities.



Figure S4. Rate performance curve of n-Ti₂SnC under different current densities.



Figure S5. Nyquist curve of n-Ti₂SnC electrode.



Figure S6. (a) AFM image of the original n-Ti₂SnC. (b) the corresponding height measurement. (c) AFM image of n-Ti₂SnC after 1000 charge/discharge cycles. (d) the corresponding height measurement.



Figure S7. XRD of original n-Ti₂SnC and that after 1000 charge/discharge cycles.



Figure S8. HRTEM image of the original n-Ti₂SnC.



Figure S9. HRTEM image of n-Ti₂SnC after 1000 charge/discharge cycles.



Figure S10. Sn 3d XPS of original n-Ti₂SnC electrode.



Figure S11. Sn 3d XPS of n-Ti₂SnC electrode after 1000 charge/discharge cycles.



Figure S12. O 1s XPS of original n-Ti₂SnC electrode.



Figure S13. O 1s XPS of n-Ti₂SnC electrode after 1000 charge/discharge cycles.