## **Supplemental information**

## **Rb**<sub>4</sub>Li<sub>2</sub>TiOGe<sub>4</sub>O<sub>12:</sub> a novel high-performance titanyl germanate anode for Li-ion batteries

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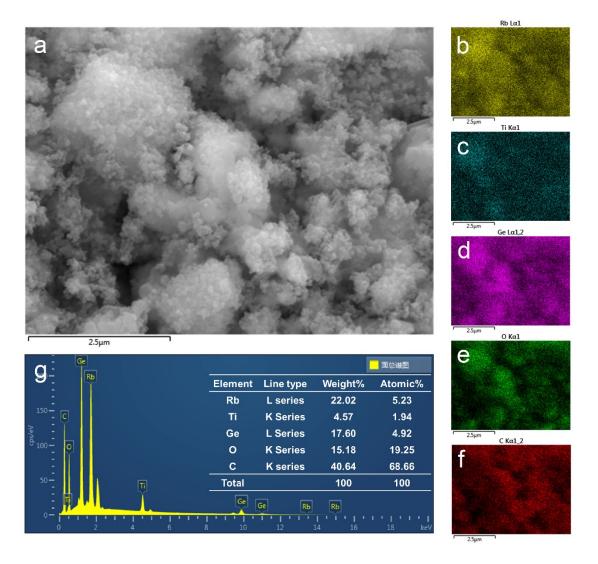


Fig. S1. (a) SEM image of the RLTG/C, (b-f) EDS elemental mapping of Rb, Ti, Ge,

O and C, respectively, and (g) EDS elemental ratio of RLTG/C.

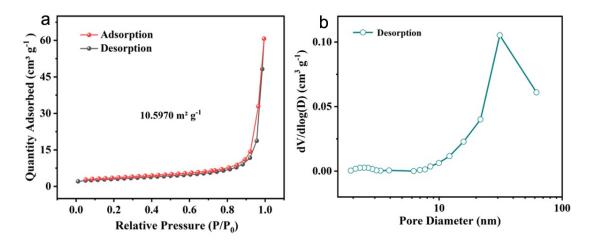
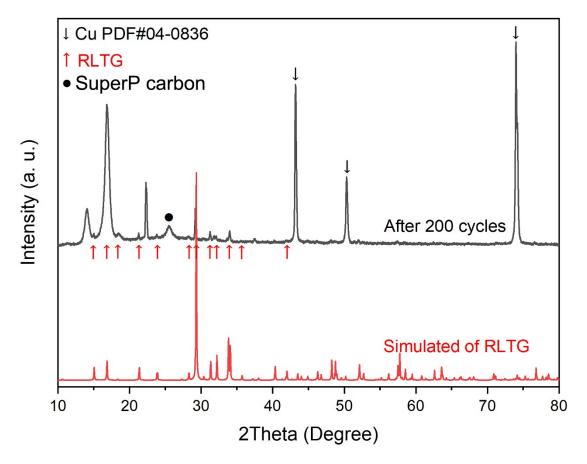


Fig. S2. (a)  $N_2$  adsorption and desorption isotherms and (b) pore size distribution of the RLTG/C.



**Fig. S3.** XRD pattern of RLTG/C anode after 200 cycles compared with the simulated XRD pattern of RLTG.

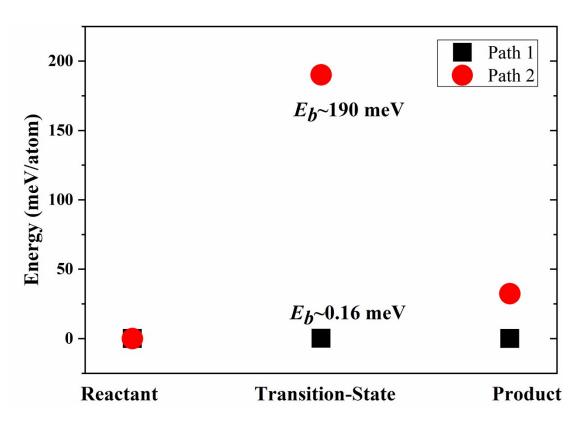


Fig S4. The barriers for two different migration paths.