The Expanded Graphite with Boron-doping for Cathode Material of High-capacity and Stable Aluminum Ion Batteries

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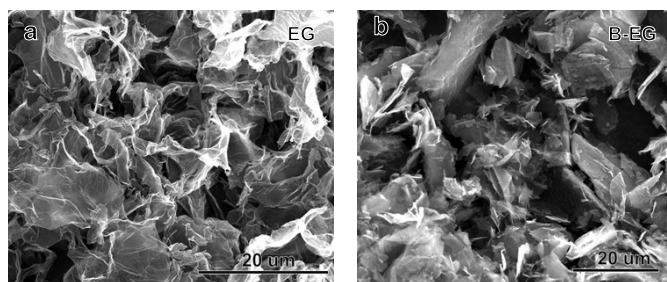
Fig. S1 The SEM images of (a) EG and (b) B-EG. The scale bar in the images is 20 um.
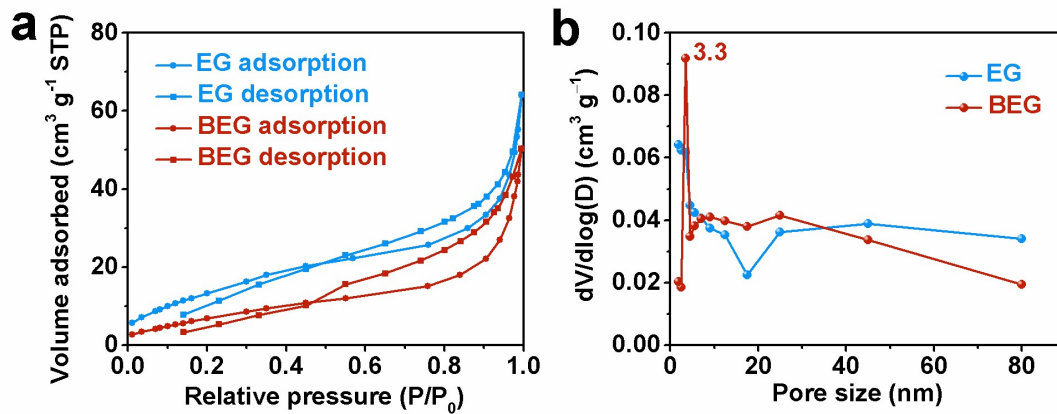
Fig. S2. The pore structure and thermal stability of EG and B-EG: (a) N_2 adsorption and desorption isotherm curves; (b) BJH pore size distribution curve.

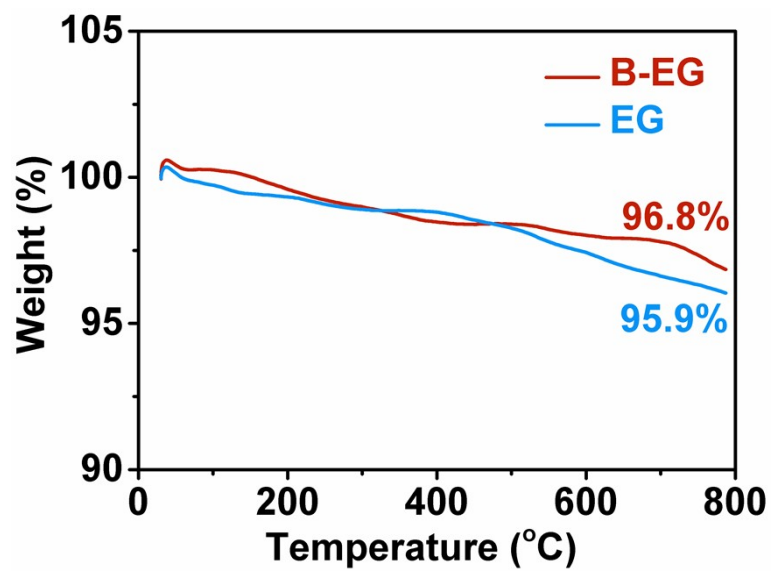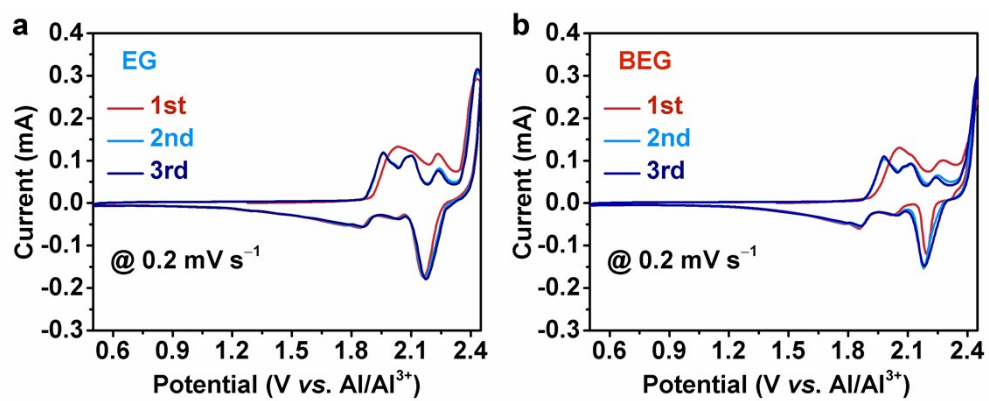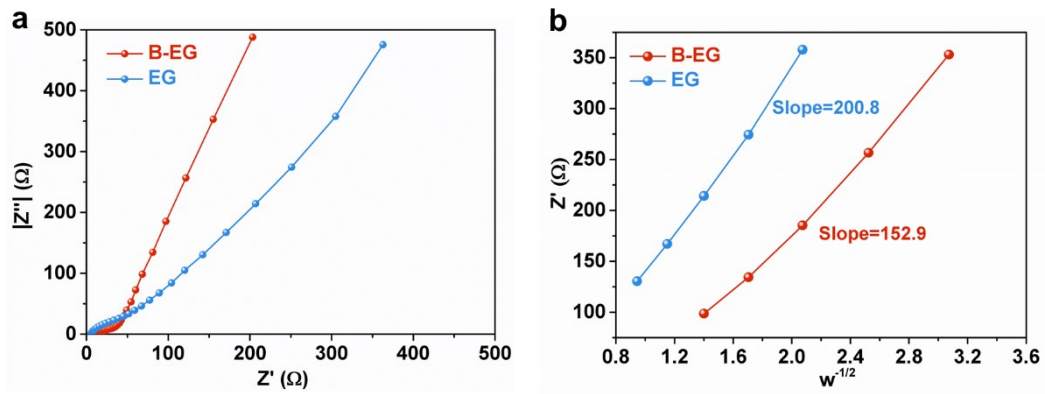**Fig. S3**. Thermal gravity analysis curve at N_2 atmosphere.

Fig. S4. The first three CV curves of (a) EG and (b) B-EG at a scan rate of 0.2 mV s^{-1}.

Fig. S5. (a) The EIS spectra of the EG and B-EG electrodes after cycling at a current density of 500 mA g^{-1}. (b) Z' as a function of the $\omega^{-1/2}$ plot in the low-frequency range (the slope of fitting curves is the Warburg factor, σ_ω).