Electronic Supplementary Material (ESI) for Sustainable Energy & Fuels.

Balancing Cathode and Anode by Reduced Graphene Binder for Boosting Both Energy and Power Density of Hybrid Supercapacitors

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Figure S1. Photograph of (left) LTO-GO and (right) PAC-GO mixture solution. Both particles are well dispersed with GO sheet in water for two weeks.

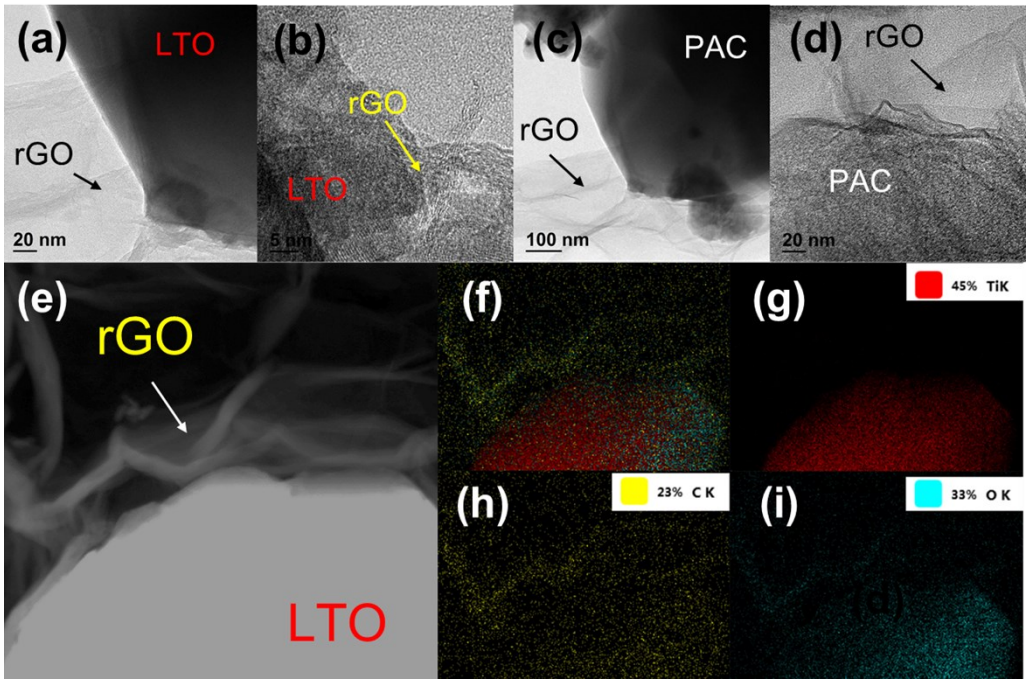

Figure S2. TEM images of LTO-rGO (a, b); and PAC-rGO (c, d); EDS mapping images of LTO-rGO (e-i)

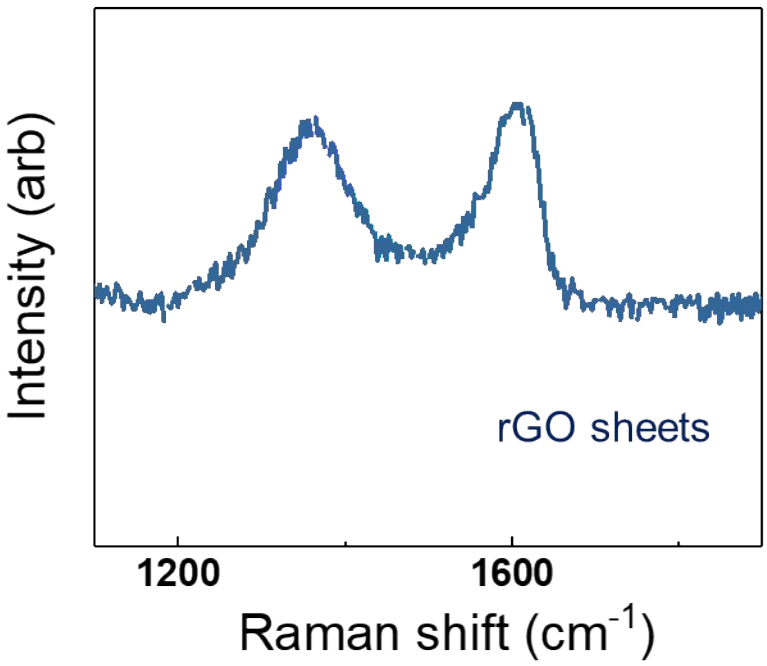

Figure S3. Raman spectra of rGO sheets.

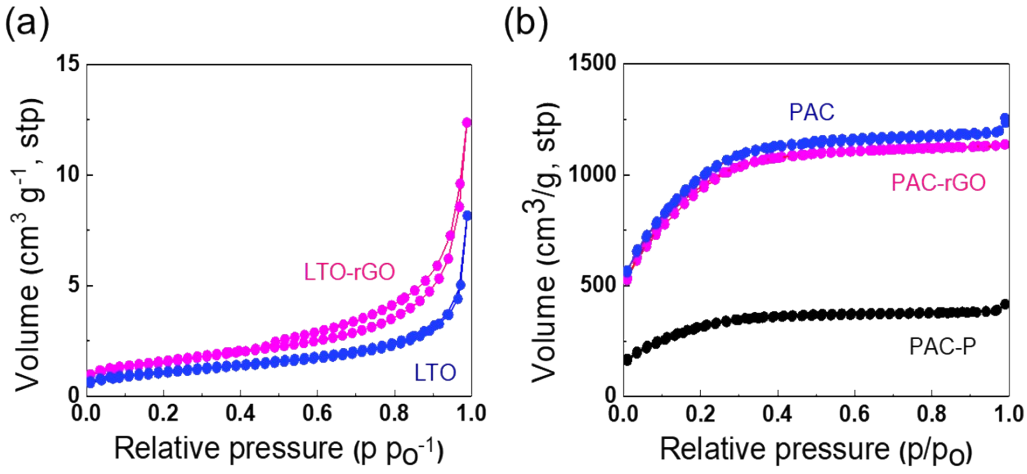

Figure S4. Nitrogen adsorption and desorption isotherm of (a) LTO-rGO and LTO, (b) PAC-rGO and PAC, and PAC-P.

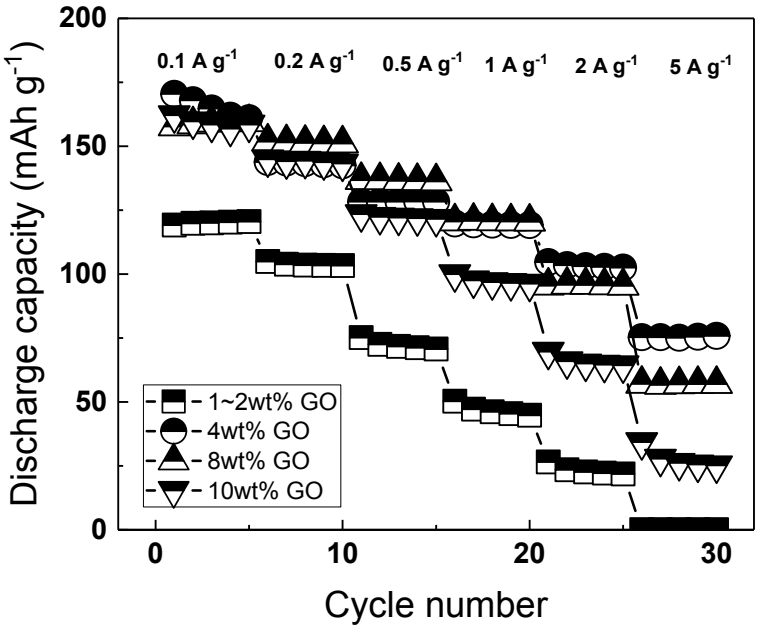

Figure S5. Rate capability of LTO–rGO electrode made with various wt% of GO binder at different current densities.

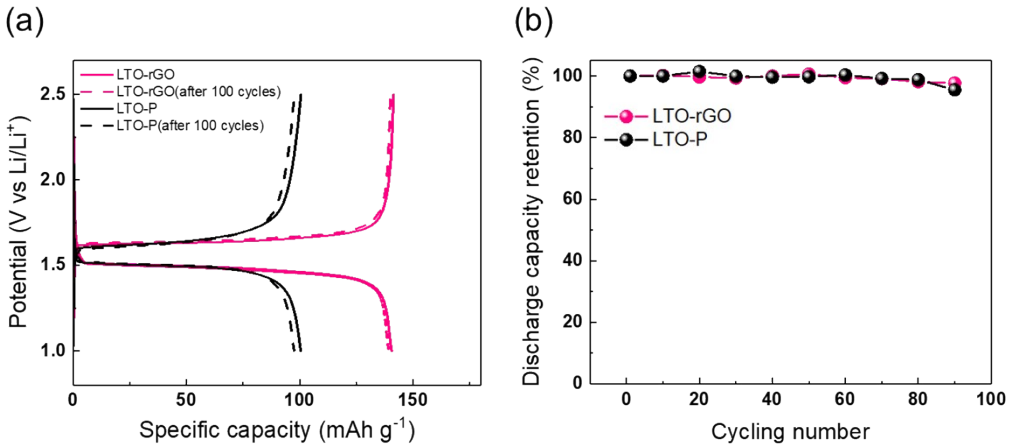

Figure S6. (a) Voltage-capacity curves at 0.5 A g^{-1} for LTO-rGO and LTO P after cycle 1 and cycle 100. (b) Cyclic performances of LTO-rGO and LTO P at 0.5 A g^{-1}

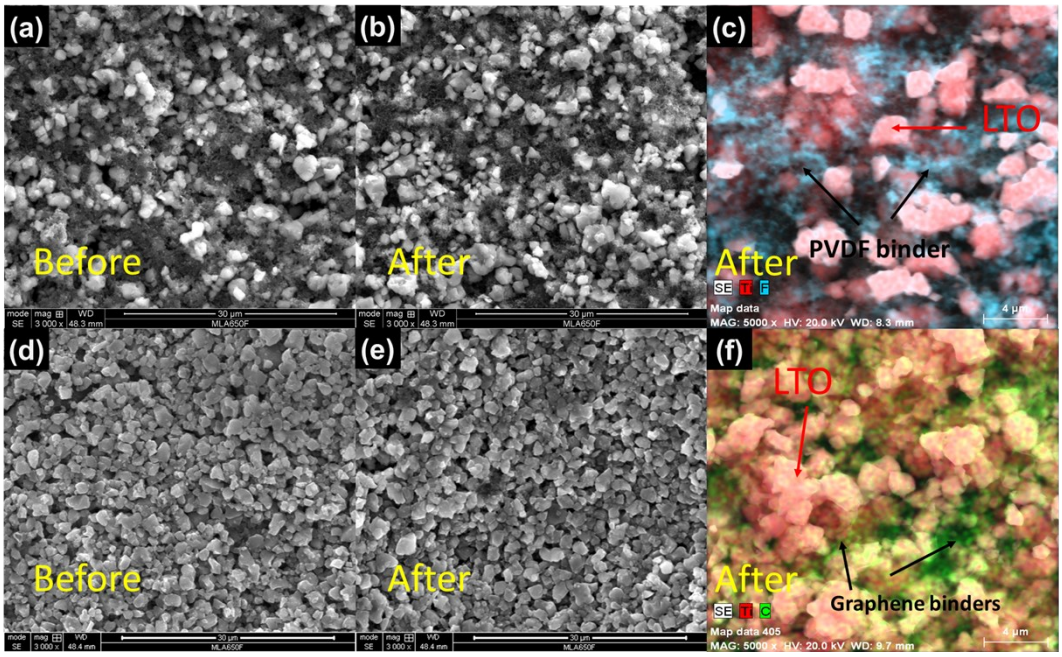

Figure S7. SEM images (a,b) LTO-P and (d,e) LTO-rGO before and after 100 cycles; SEM-EDS elemental mapping images of (c) LTO-P and (d) LTO-rGO after 100 cycles.

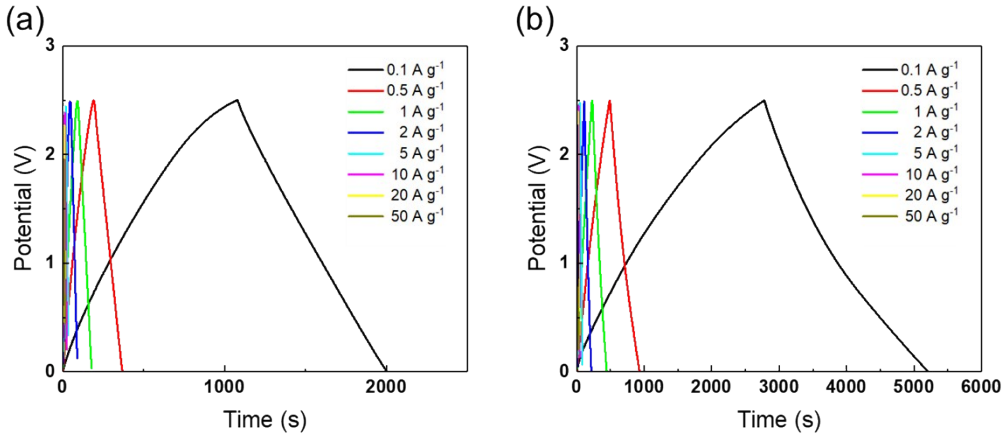

Figure S8. GCD curves of (a) PAC-P and (b) PAC-rGO at different current density from 0.5 to 50 A g^{-1}.