Article

Orange-Peel-Derived Carbon: Designing Sustainable and High-Performance Supercapacitor Electrodes

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Figure S1. TG and DTG curves of orange peel powder.



Figure S2. GCD characteristics of OPAC-1 electrode at different current densities in 3 M KOH electrolyte.



Figure S3. IR drop of OPAC-1electrode at current density of (a) 0.5 A/g and (b) 20 A/g in 3 M KOH electrolyte.



Figure S4. CV curves of OPAC-1 at scan rates of (a) 10 mV/s and (b) 200 mV/s in 3 M KOH, NaOH and LiOH electrolytes.



Figure S5. Bodes plots of frequency vs impedance for the OPAC-1 electrode in 3 M KOH, NaOH and LiOH electrolytes.



Figure S6. Log (discharge current density) vs log (scan rate) plot obtained using discharge current densities at 0.5 V from the CV curves at various scan rates.



Figure S7. Bodes plots of frequency vs impedance of OPAC-1-based supercapacitor at 10, 20, 40, and 70 °C in 3 M KOH electrolyte.