Electronic Supplementary Information

Poly(anthraquinonyl imide) as a high capacity organic cathode material for Na-ion batteries

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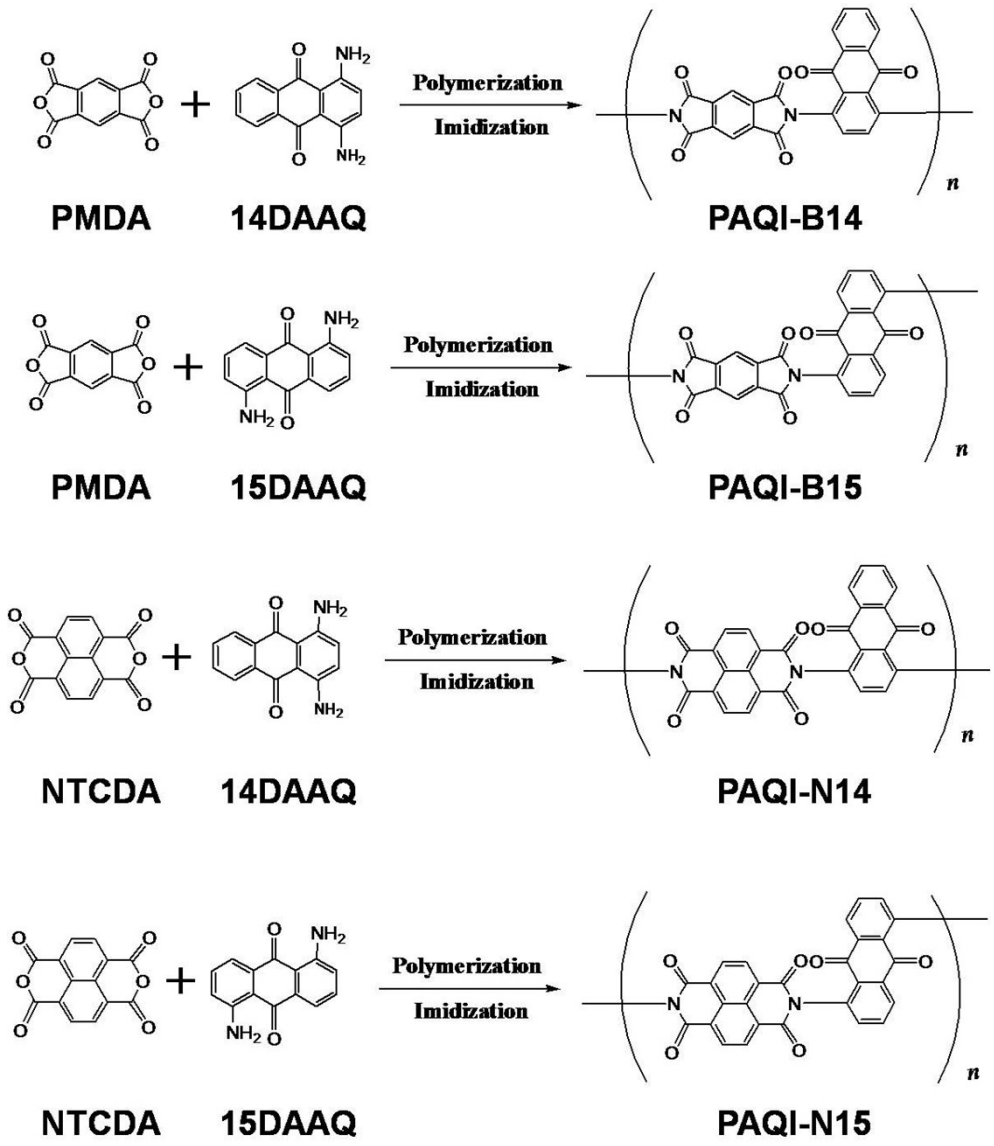

Fig. S1 Synthesis routes of **PAQI**s.

Fig. S2 Structures of PMDI and NTCDI groups.

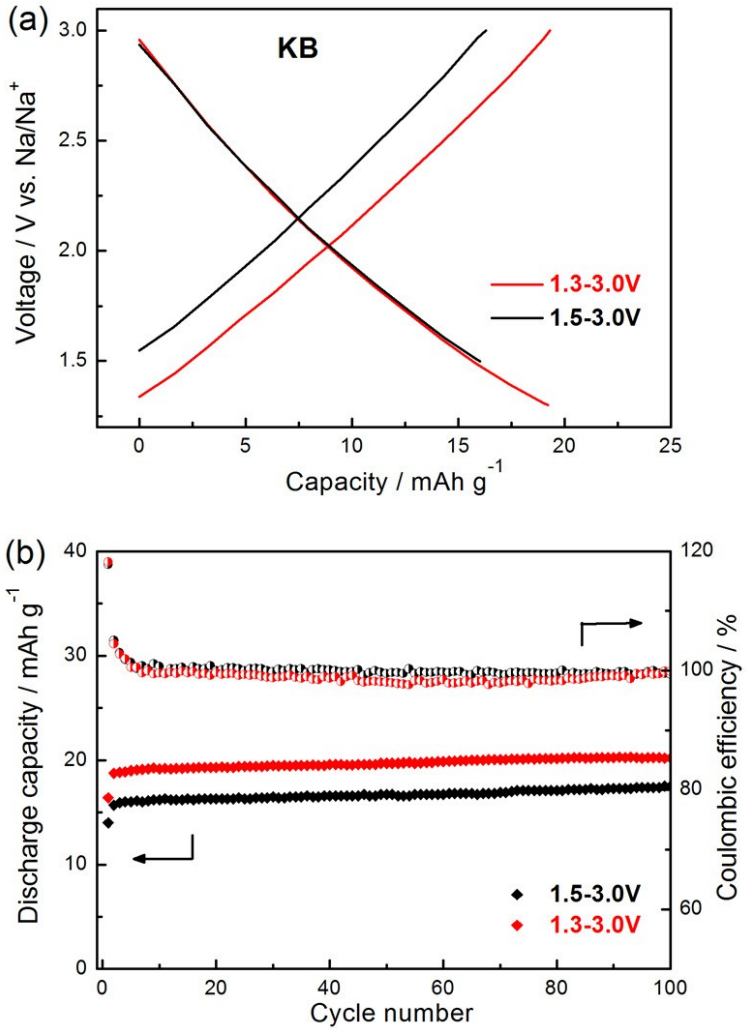

Fig. S3 (a) Typical discharge/charge profiles (5th cycle) and (b) cycling performance of Na/KB cells with the voltage intervals of 1.5–3.0 and 1.3–3.0 V at a constant current of 50 mA g^{-1}.

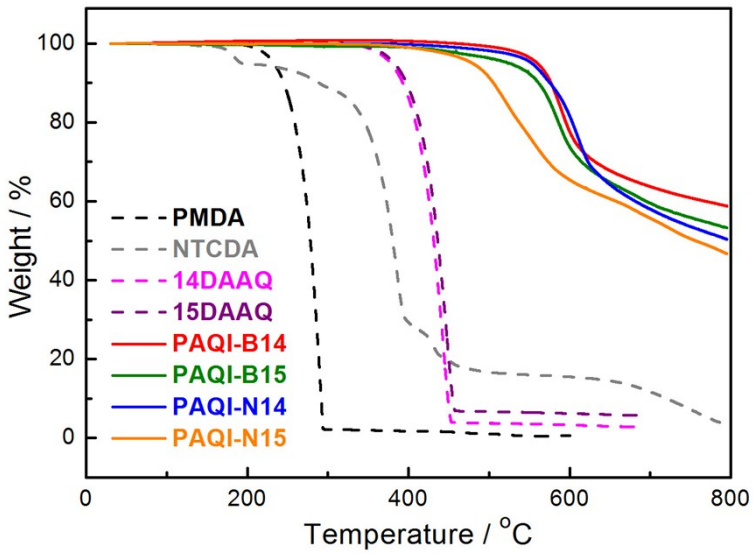

Fig. S4 TG curves of **PAQI**s and the reactants.

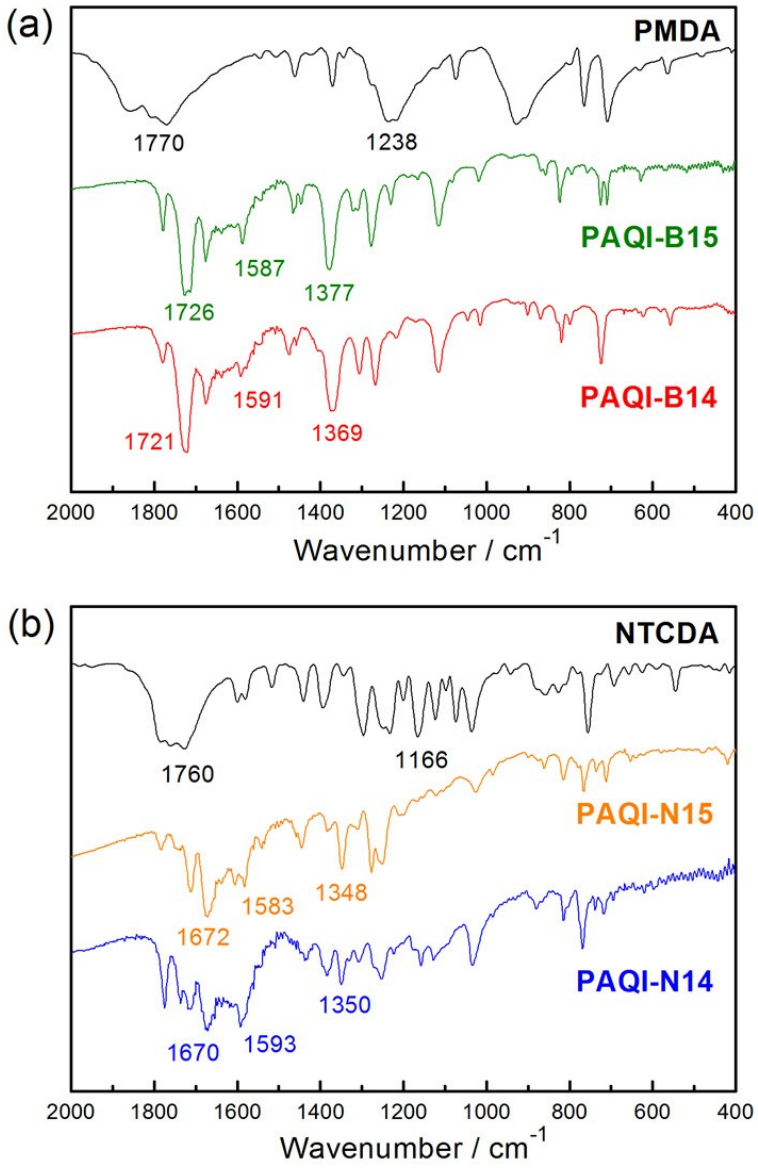

Fig. S5 FTIR spectra of **PAQI**s, PMDA, and NTCDA.

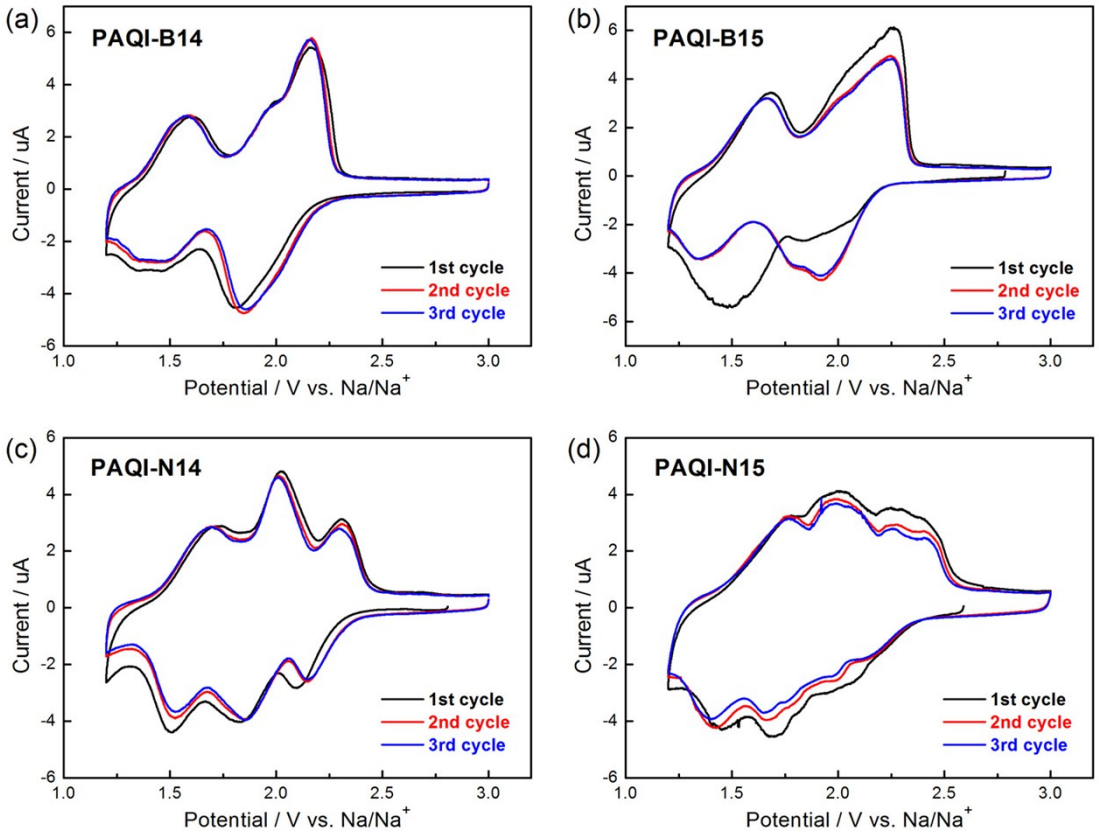

Fig. S6 CV curves of **PAQI** electrodes at a scan rate of 0.1 mV s^{-1}.

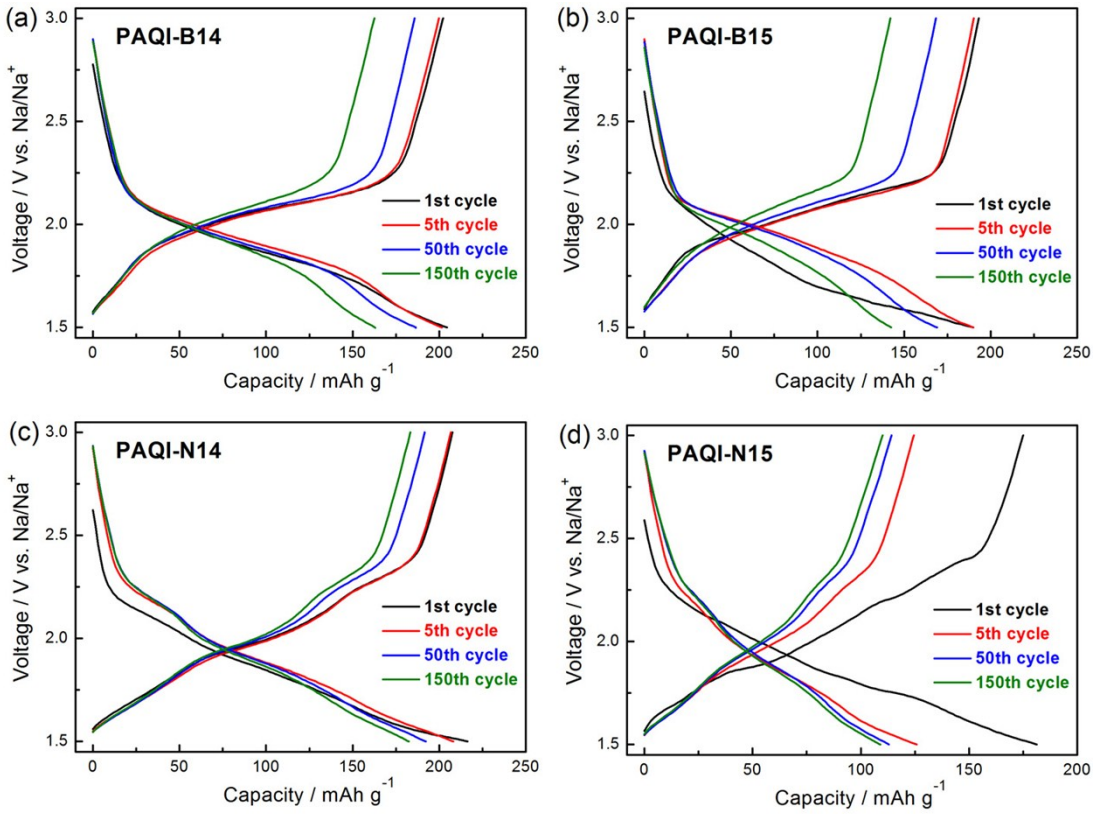

Fig. S7 Discharge/charge profiles of Na/**PAQI** cells at a constant current of 50 mA g^{-1} with the voltage interval of 1.5–3.0 V.

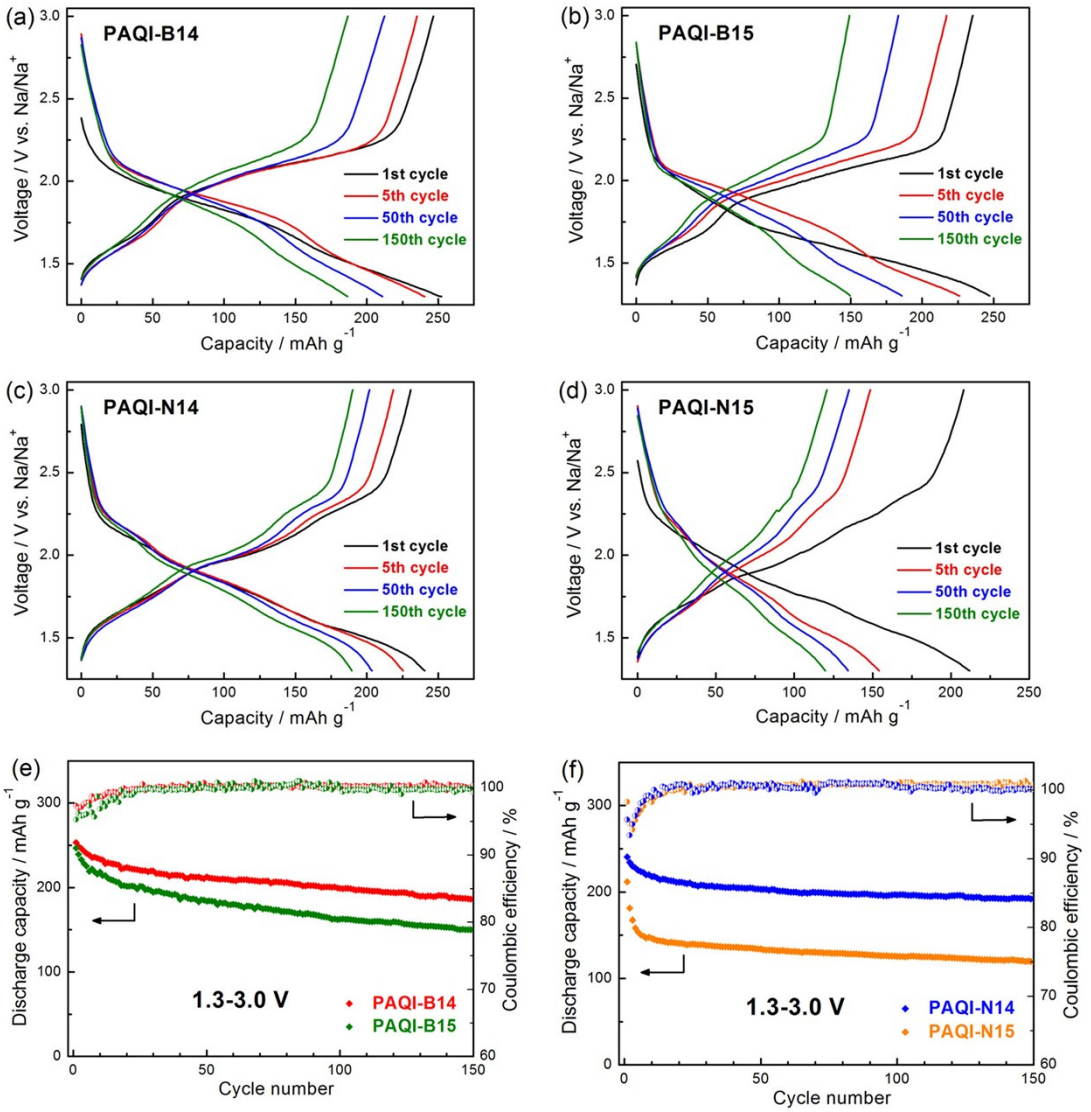

Fig. S8 Discharge/charge profiles and cycling performance of Na/**PAQI** cells at a constant current of 50 mA g^{-1} with the voltage interval of 1.3–3.0 V.