



S-1

The intermediate results on the capacitance and the charge were calculated using  $dq = i \times dt / m = i \times dV / (m \times v)$ ,  $C_s = dq / dV$ , similar to Eq. 1, as shown in S-1. The specific capacitance ( $C_s$ ) and charge ( $q$ ) are potential-dependent as shown in above figure. For the sample, ATM50,  $C_s$  is in a range from 170 to 315 F/g. In Table I, the average capacitances were given out.