

Fig. S 1. (a)Cycling performance and (b) of pure maleic acid anode.

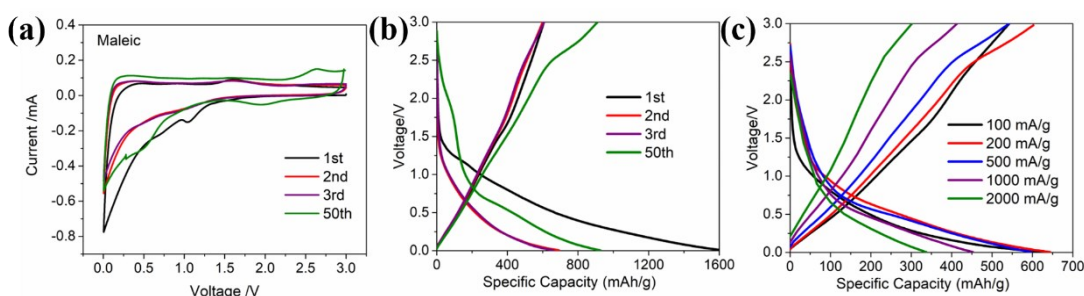


Fig. S 2. (a) CV curves of pure maleic acid anode at scan rate of 0.2 mV/s.  
(b)(c)Charge-discharge curves of pure maleic acid anode at 100 mA/g and different current rate.

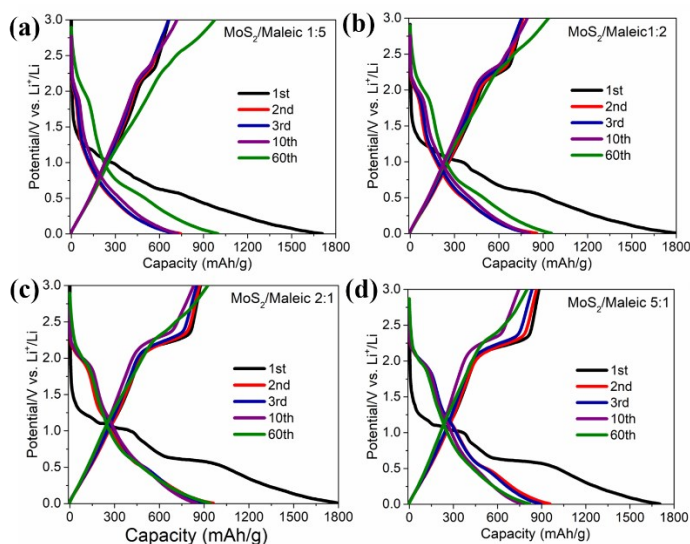


Fig. S 3 Charge-discharge profiles of (a)MoS<sub>2</sub>/Maleic 1:5, (b) 1:2, (c) 2:1, and (d) 5:1, at current density of 100 mA/g.

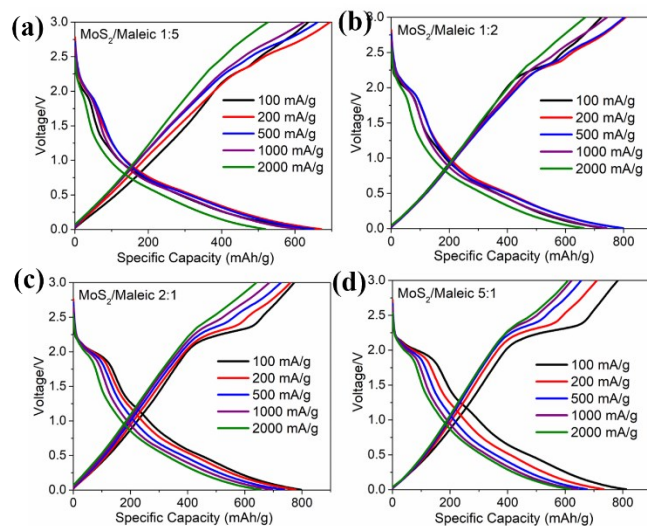


Fig. S 4. Charge-discharge profiles of (a)MoS<sub>2</sub>/Maleic 1:5, (b) 1:2, (c) 2:1 and (a)5:1, at different current density.

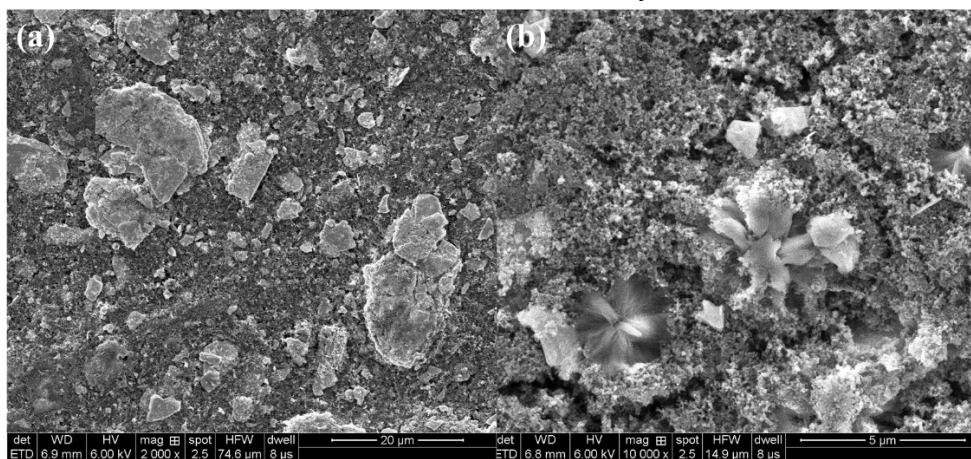


Fig. S 5. SEM images of (a) pristine MoS<sub>2</sub> and (b) MoS<sub>2</sub>/Maleic 1:1 anode before cycle.

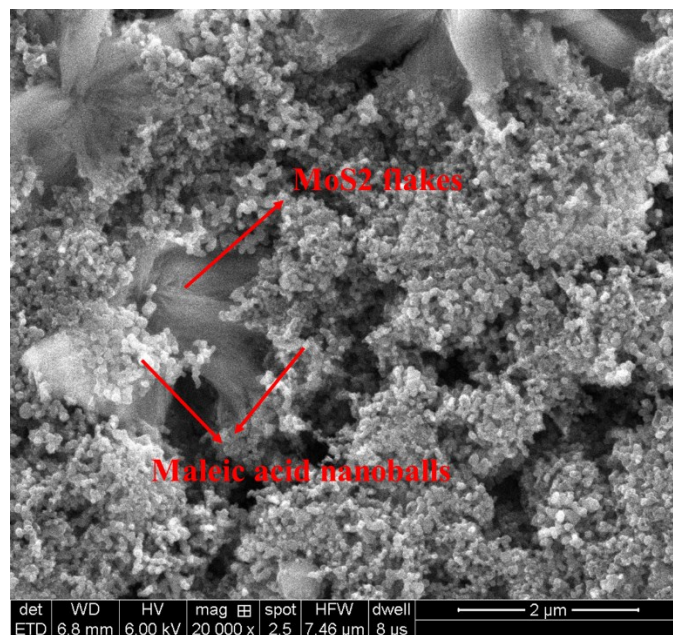


Fig. S 6. HRSEM image of pristine MoS<sub>2</sub>/maleic 1:1 anode.