

The preparation method of carbon capacitor electrodes:

The preparation and measurement of carbon electrodes are as follows: the capacitor electrodes were obtained by pressing a mixture of the resulting carbon (80 wt.%), acetylene black (10 wt.%) and polytetrafluoroethylene (PTFE) (10 wt.%) to the foam nickel collector. The electrodes had a surface of 100 mm² and thickness of 0.4 mm. A platinum wire and Hg/HgO were used as the counter and reference electrodes, respectively. The electrolyte was 30 wt.% KOH aqueous solution. The galvanostatic charge/discharge capacitance (C) of electrode was measured using a Program Testing System (LAND CT2001, produced by Wuhan Jinnuo Electron Co. Ltd., China). Charge and discharge voltages were ranged between 0.8 and 0.01 V.