

Highly conductive electrodes for Li-ion batteries using MWCNTs as a conducting agent

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To improve the electron transport in a negative electrode of Lithium-ion batteries, we prepare multi-wall carbon nanotubes (MWCNTs) and vapour-grown carbon fiber (VGCFs) used for conducting agents of anode materials. Specific MWCNT achieved high discharge capacity up to 328 mAh/g (graphite electrode 298.1 mAh/g) at the high current density. Electrode with 1 wt% specific MWCNT showed high capacity than 5 wt% and 10 wt%. Also, when electrolyte was changed, discharge capacity of electrode with specific MWCNT increased up to 302.8 mAh/g from raw electrode, 130.6 mAh/g.