

CNT Sheet/Inhibiting Lithium Dendrite

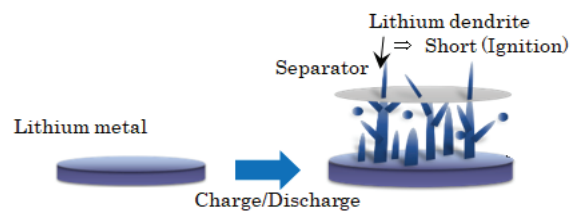
Features

Found to be effective in inhibiting the formation of dendritic crystals of lithium metal

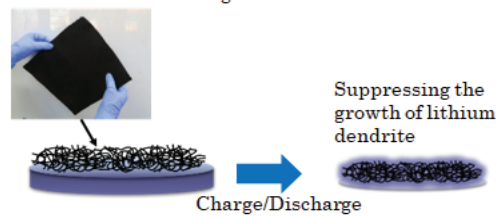


SGCNT Sheet

Safety issues with lithium dendrite growth

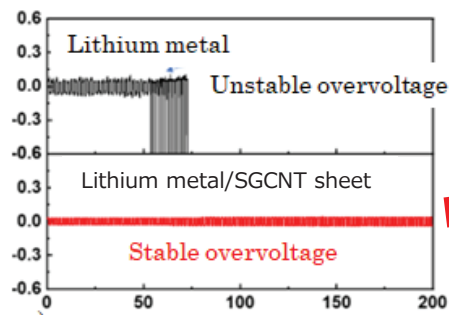
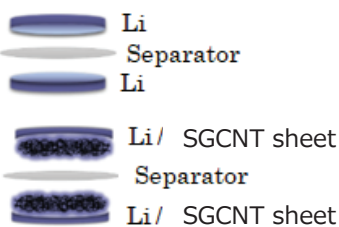


In case of using SGCNT sheet



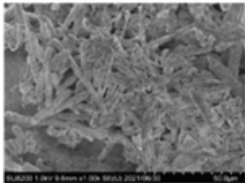
Properties

Accelerated charge/discharge degradation test

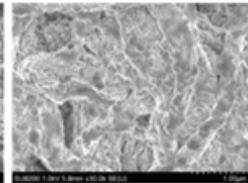
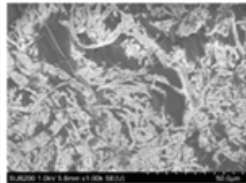


After charge/discharge test (SEM image)

Lithium metal



Lithium metal/SGCNT sheet

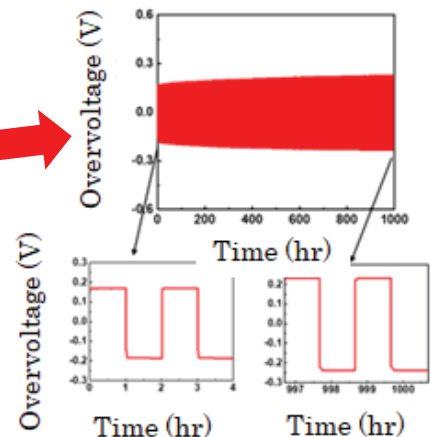


Magnification $\times 1k$

$\times 1k$

$\times 30k$

Current density: 10mA/cm²
Capacity density: 10mAh/cm²



High-speed, large-capacity
charge/discharge

Inserted SGCNT sheet brings about a stable potential difference even after 200 hours of use

Cooperation with National Institute of Advanced Industrial Science and Technology (AIST)

ZEON