

Technical data

Categories No: TNSC

Name: Purified -COOH Functionalized Single-walled Carbon

Nanotubes (SWCNTs-COOH)

Purity: >90%

-COOH Content: 2.73wt%

(The rate of surface carbon atom: 8-10mol%)

Diameter: 1-2nm

Length: 5-30um

SSA: >320m²/g [SSA=Special Surface Area]

Color: Black

Tap density: 0.14 g/cm³

True density: ~2.1 g/cm³

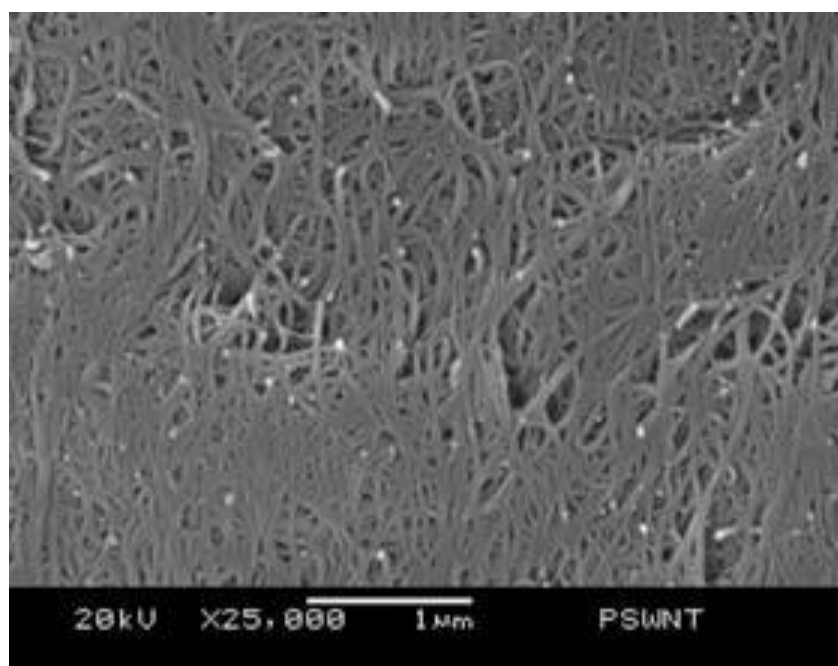
EC: >100s/cm [EC=Electric Conductivity]

Making method: CVD

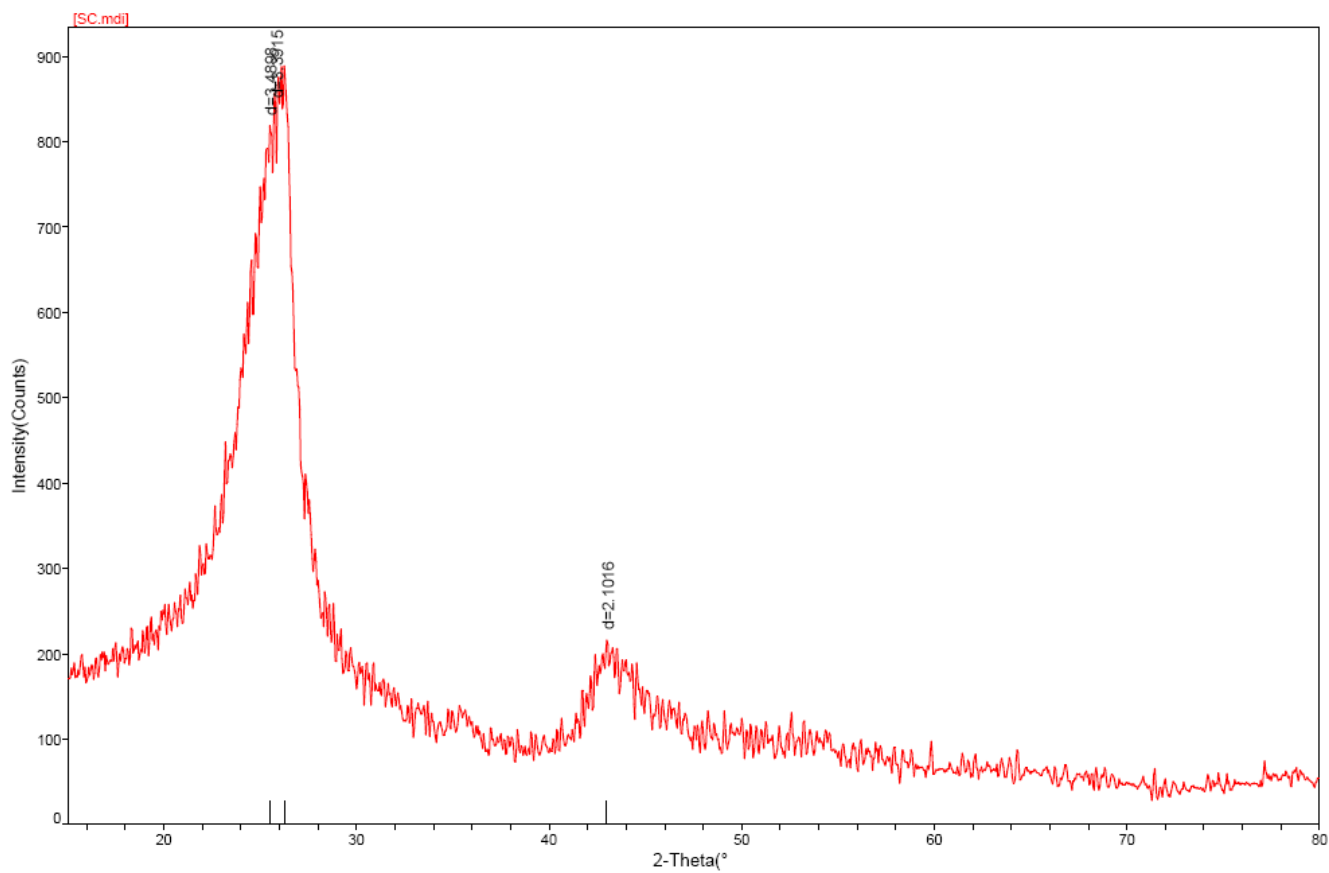
Testing pictures



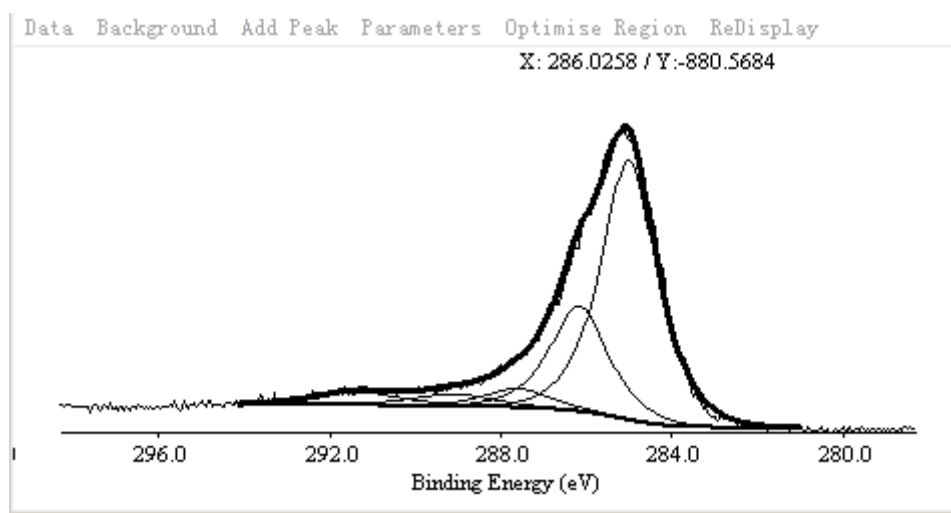
Transmission Electron Microscopy (TEM)



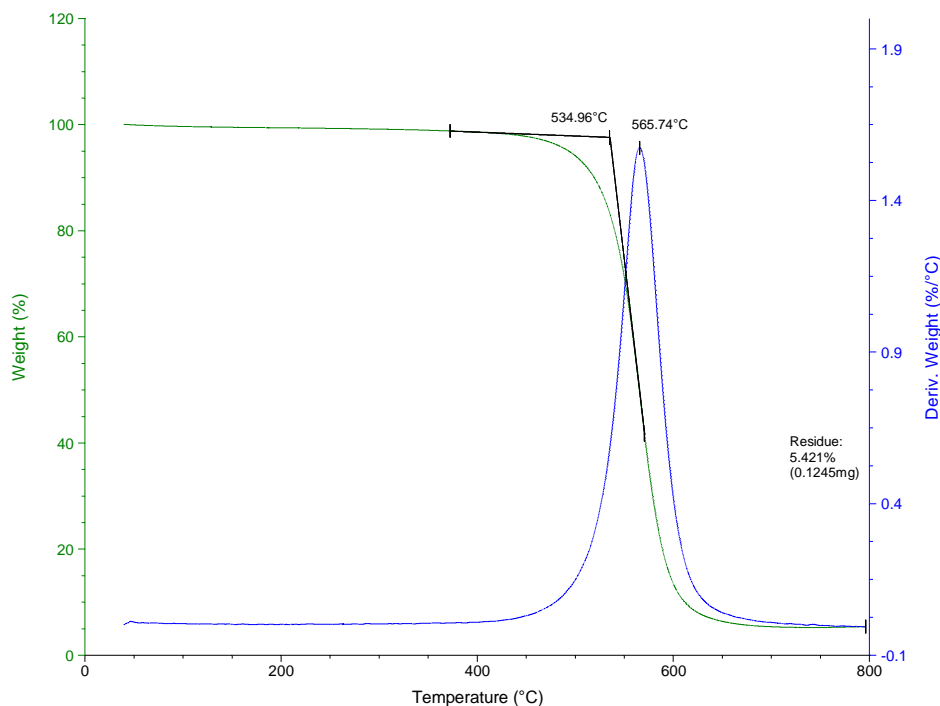
Scanning Electron Microscopy (SEM)



XRD



xps



TGA

Application instruction

Potential Applications of Carbon Nanotubes

Additives in polymers

Catalysts

Electron field emitters for cathode ray lighting elements

flat panel display

gas-discharge tubes in telecom networks

Electromagnetic-wave absorption and shielding

Energy conversion

Lithium-battery anodes

Hydrogen storage

Nanotube composites (by filling or coating);

Nanoprobes for STM, AFM, and EFM tips

nanolithography

nanoelectrodes

drug delivery

sensors

Reinforcements in composites

Supercapacitor