Technical Data Sheet

ACS Material Carboxyl Graphene

(Powder and Dispersion)

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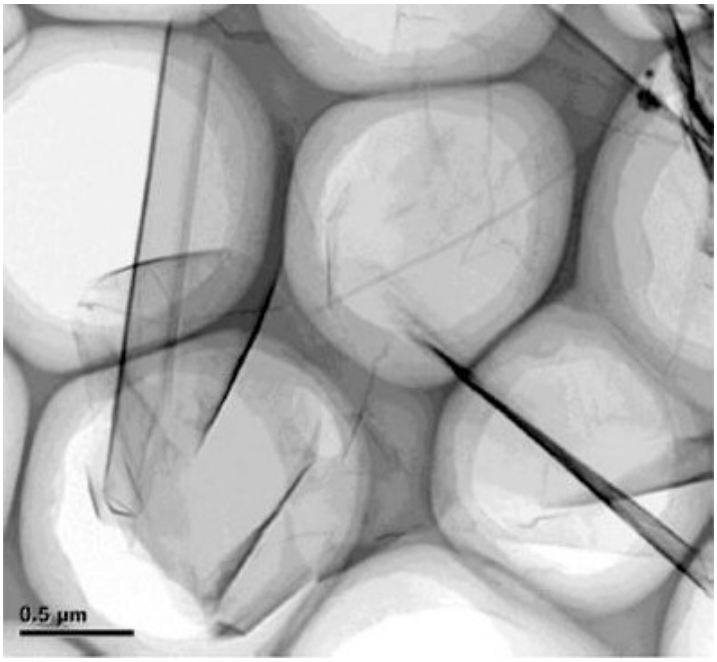
1. Preparation Method

1) Modified Hummer's Method to make graphene oxide

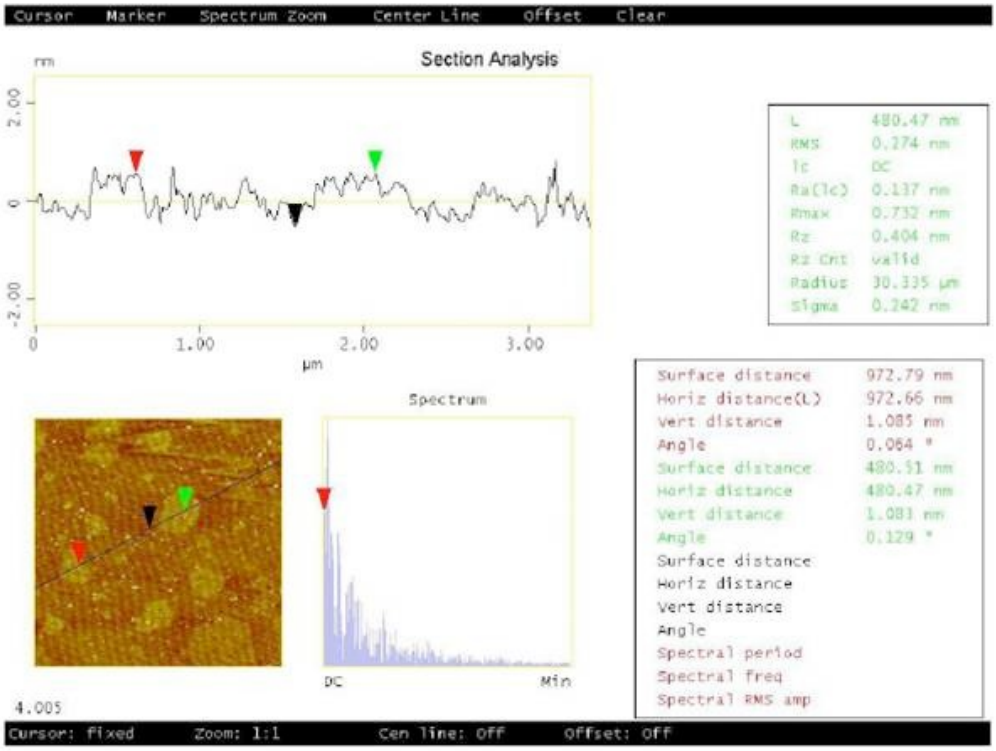
2) Convert –OH and C-O-C into –COOH.

2. Characterizations

Purity:	>99%
Size:	1-5 μm
Thickness:	0.8-1.2 nm
Carboxyl Ratio:	5 wt.%

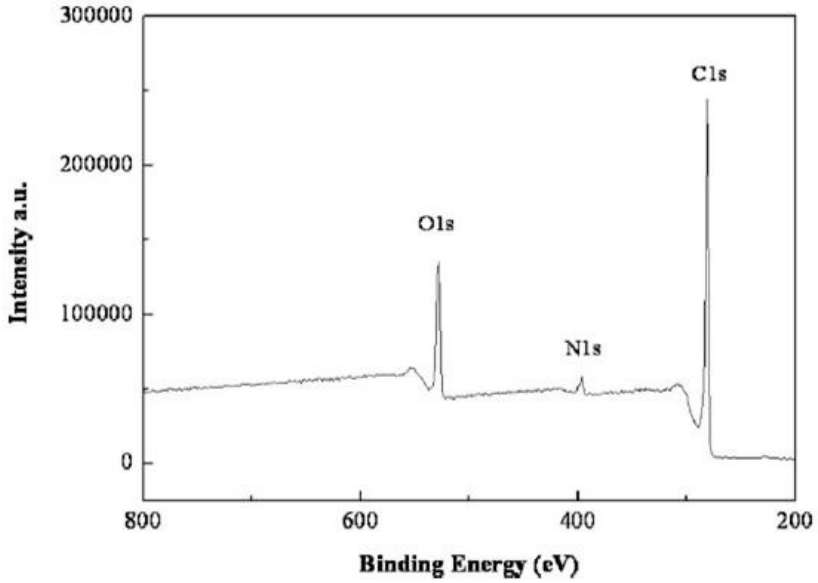


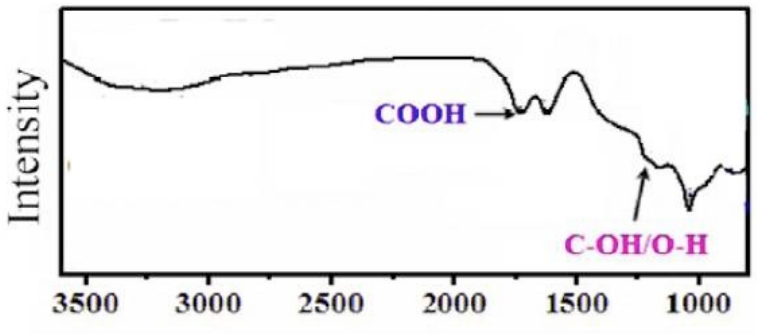
Typical TEM Image of ACS Material Carboxyl Graphene



AFM Analysis

AFM Analysis of ACS Material Carboxyl Graphene





FT-IR of ACS Material Carboxyl Graphene

3. Application Fields

1) Catalyst
2) Supercapacitors
3) Solar energy
4) Graphene semiconductor chips
5) Conductive graphene film
6) Graphene computer memory
7) Biomaterials
8) Transparent conductive coatings