



Technical Data Sheet

ACS Material Graphene Oxide

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Contact Information:

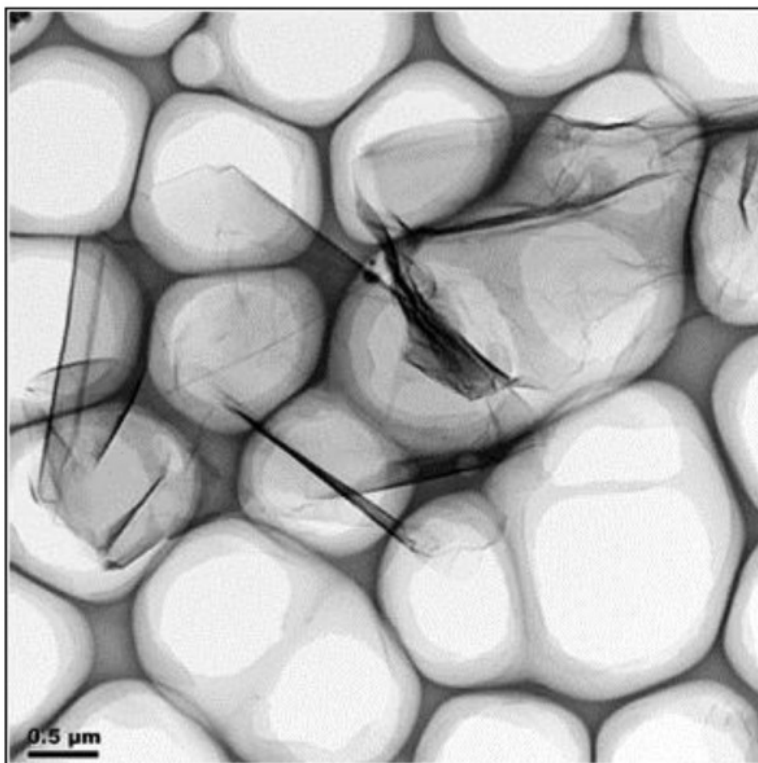
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Revision: 061517

1. Preparation Method

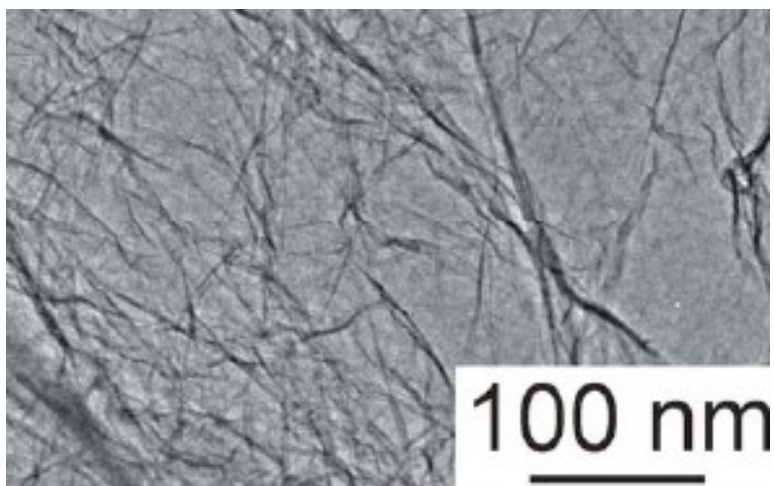
Modified Hummer's Method

2. Characterizations

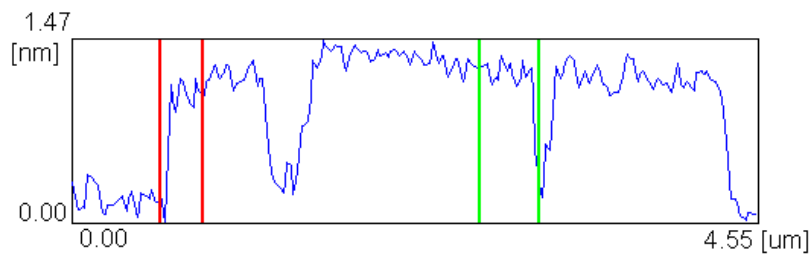
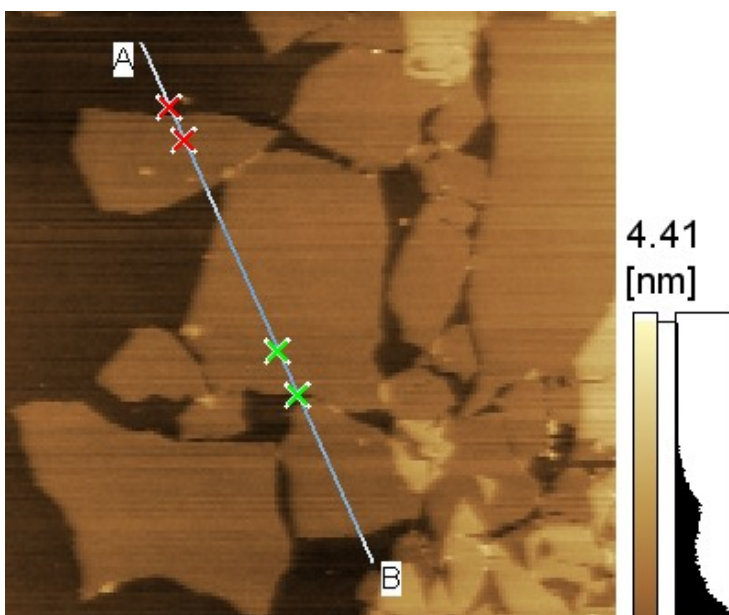
Purity:	~ 99%
Diameter:	1-5 μm
Thickness:	0.8-1.2 nm
Singer layer Ratio:	>80%



Typical TEM Image (1) of ACS Material Single Layer Graphene Oxide (H Method)



Typical TEM Image (2) of ACS Material Single Layer Graphene Oxide (H Method)



	Width[um]	Height[nm]	Angle[deg]
—	0.28	0.86	0.17
—	0.39	0.93	0.13

AFM Analysis of ACS Material Single Layer Graphene Oxide (H Method)

- The TEM and AFM analysis were completed through dispersing ACS-Material Graphene Oxide into water or ethanol with the help of ultrasound.

Elemental compositions of graphene oxide

Sample	N (wt %)	C (wt %)	O (wt %)	C/O at. ratio
Graphene Oxide	0	51.26	40.78	1.67

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

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