



Technical Data Sheet

ACS Material Graphite Oxide

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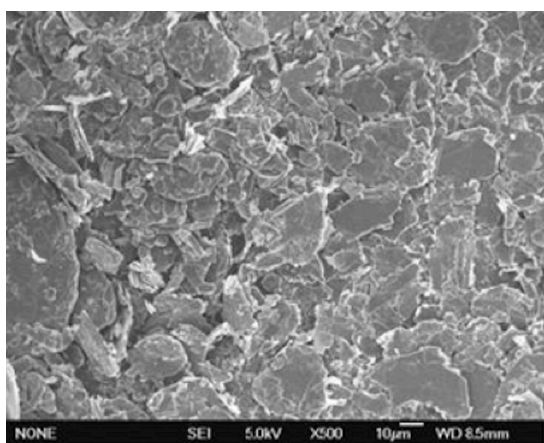
Revision: 112717

1. Preparation Method

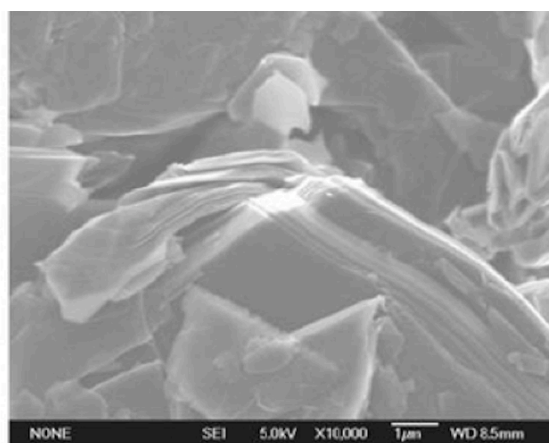
Modified Hummer's Method

2. Characterizations

Grade:	Industrial Grade
Appearance:	Brownish Yellow Powder
Purity:	N/A
Lateral size:	0.2-10 μm
Thickness:	~ 2 nm
pH (1mg/mL):	~ 3.57
Singer layer Ratio:	$>95\%$
Carbon Content:	~ 42.7 wt. %
Oxygen Content:	~ 51.6 wt. %
Sulfur Content:	<2.1 wt. %
Ash Content	<1.0 wt. %
Tap Density:	~ 0.50 g/mL
Grain Size (mesh):	<80

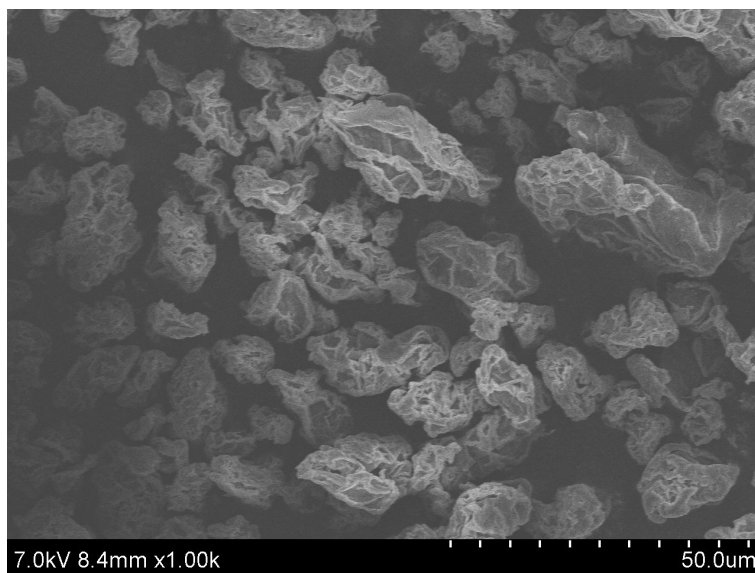


(a)

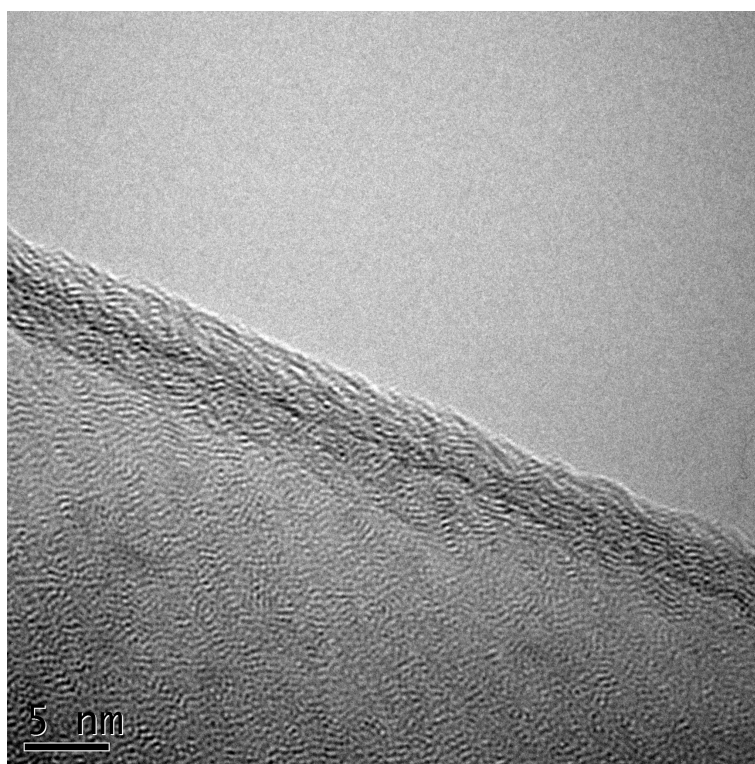


(b)

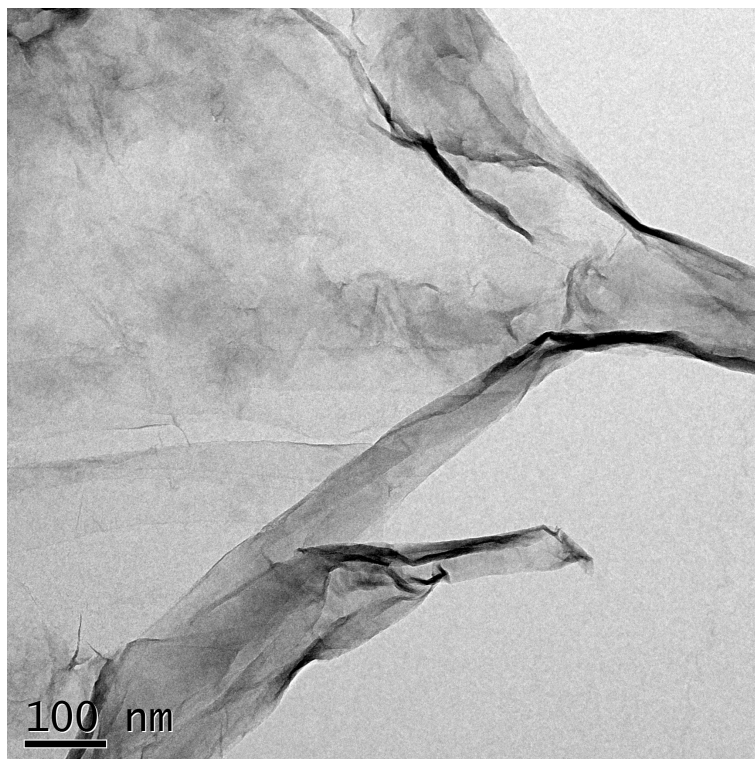
Typical SEM of ACS Material Graphite (a, b)



Typical SEM of ACS Material Graphite Oxide (Industrial Grade)



Typical TEM (1) of ACS Material Graphite Oxide (Industrial Grade)



Typical TEM (2) of ACS Material Graphite Oxide (Industrial Grade)

3. Application Fields

- 1) Preparation of graphene
- 2) Solar energy
- 3) Graphene semiconductor chips
- 4) Conductive graphene film
- 5) Graphene computer memory
- 6) Biomaterials
- 7) Transparent conductive coatings

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