Technical Data Sheet

ACS Material Graphene on SiO_2 Substrate

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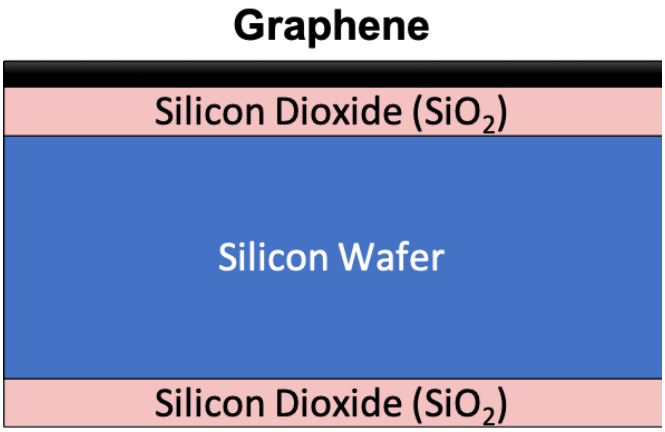
1. Preparation Method

CVD Graphene on silicon dioxide (300nm)/Si wafer substrate was prepared by the following steps:

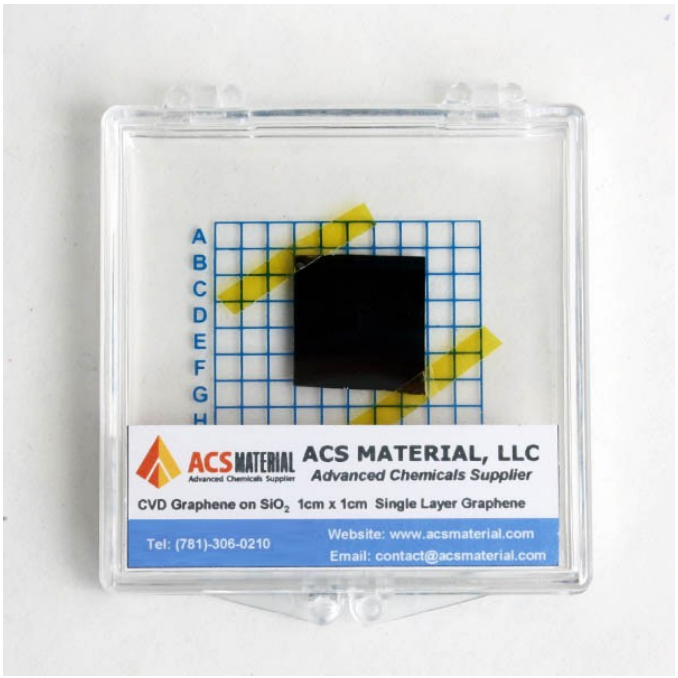
1) As-grown Monolayer graphene on copper foil
2) Deposit PMMA and Cure
3) Etch away Cu
4) Wash PMMA/Graphene in DI water
5) Place PMMA/Graphene on substrate
6) Redeposit PMMA and Cure
7) Remove PMMA with acetone

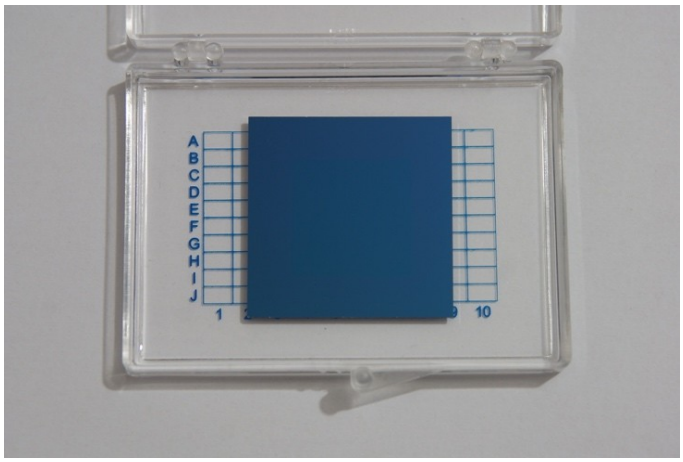
2. Characterizations

Layers:	Predominantly single-layer graphene
Sheet Resistance (Ω/sq):	<600
Custom Order (Ω/sq):	<300
Transparency (%):	>95



CVD Graphene on Silicon Dioxide (300nm)/Si Wafer Substrate





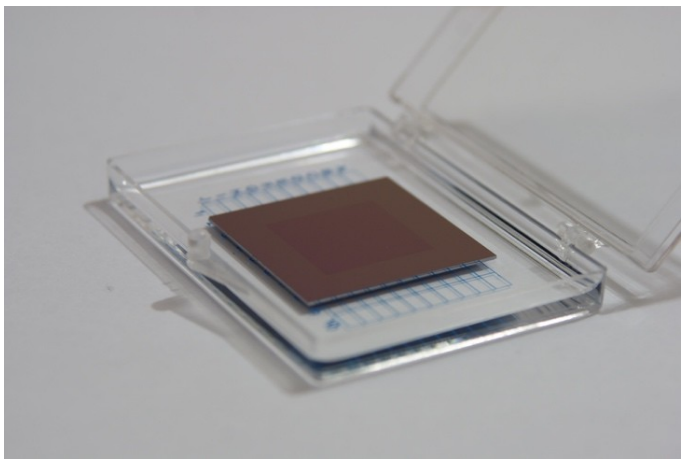
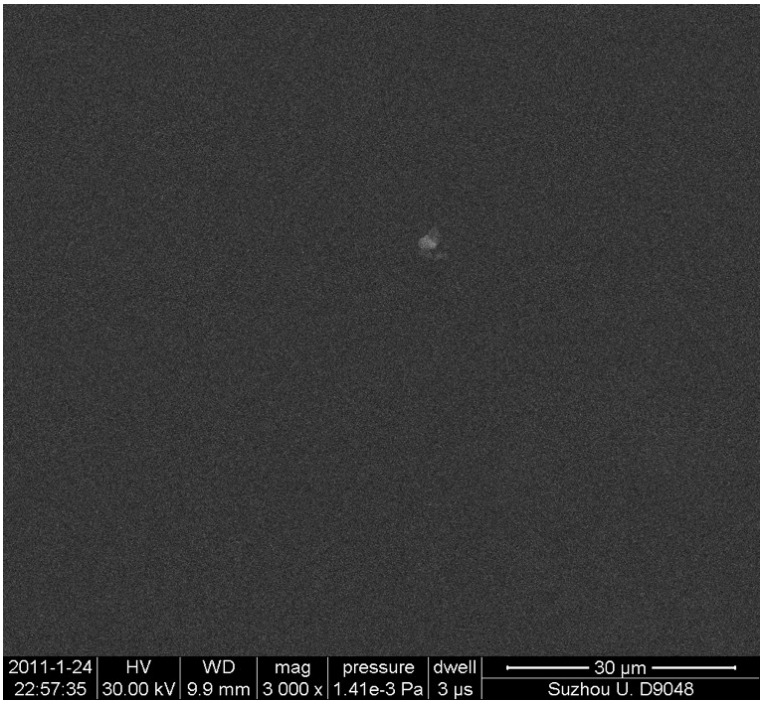
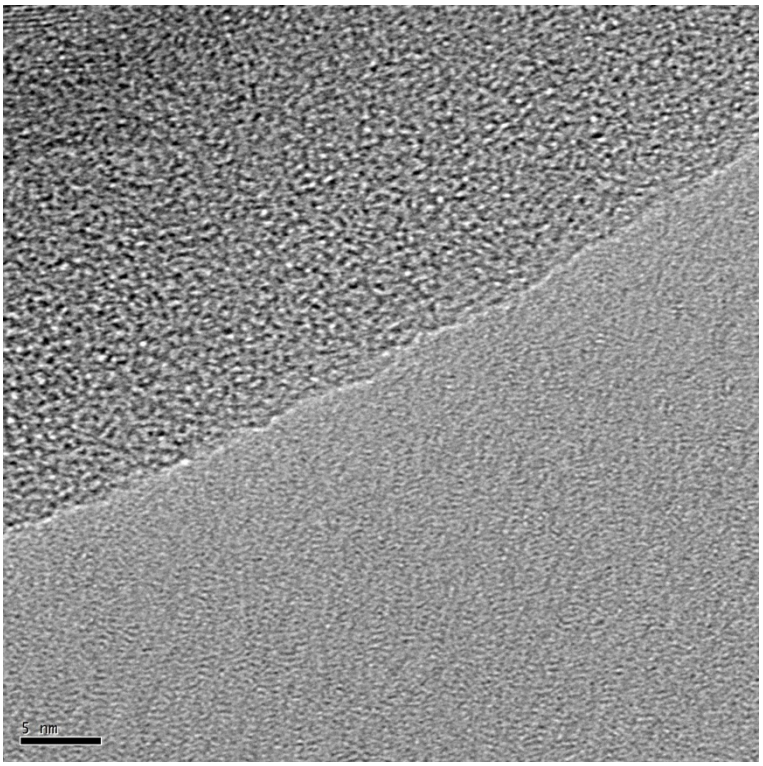


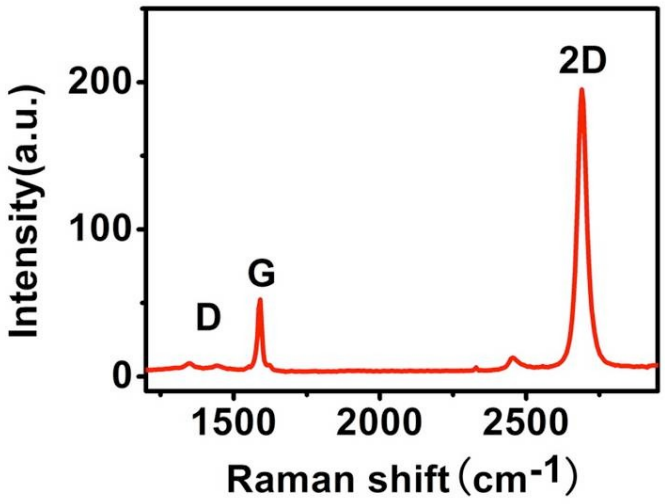
Image of ACS Material CVD Graphene on SiO_2 Substrate



Typical SEM Image of ACS Material Single Layer CVD Graphene Film



Typical TEM Image of ACS Material Single Layer CVD Graphene Film



Typical Raman Spectrum of ACS Material Single Layer CVD Graphene Film

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