

Product Datasheet

Graphenea Monolayer Graphene film on Polymer Film

Graphene Film

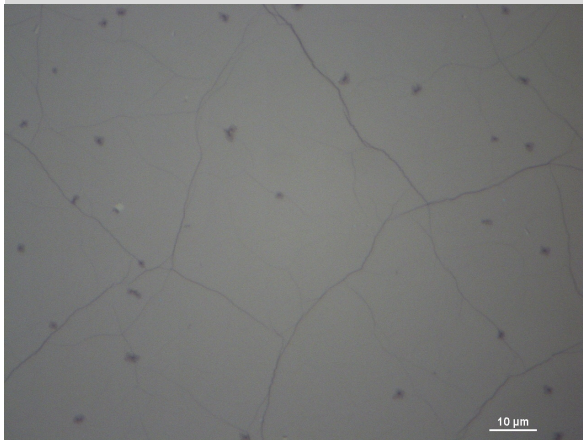
Growth Method	CVD synthesis
Transfer Method	Clean transfer method
Quality Control	Optical Microscopy & Raman checked
Appearance (Color)	Transparent
Transparency	>97%
Appearance (Form)	Film
Coverage	>95%
Number of graphene layers	1
Thickness (theoretical)	0.345 nm
AFM Thickness (air @RT)	<1nm
Electron Mobility on SiO ₂ /Si	≈1500 cm ² /V·s
Sheet Resistance on SiO ₂ /Si (Van der Pauw)	450±40 Ohms/sq. (1cm x 1cm)
Sheet Resistance on Quartz (Van der Pauw)	360±50 Ohms/sq (1cm x1cm)
Sheet Resistance on PET (Van der Pauw)	580±50 Ohms/sq (1cm x1cm)
Grain size	Up to 20 μm

Substrate

Polymer film

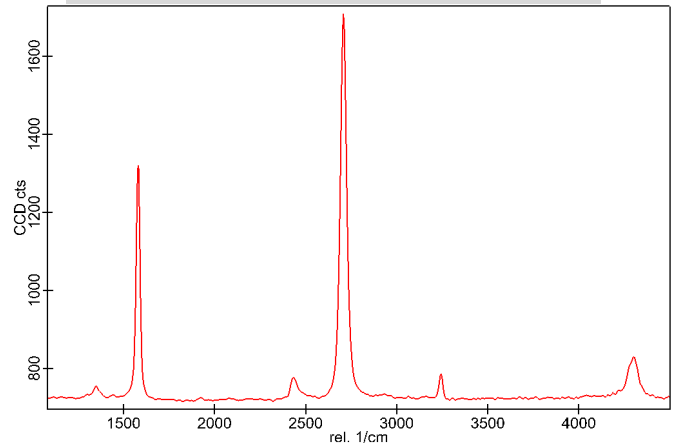
Thickness	100 μm
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Optical Microscopy



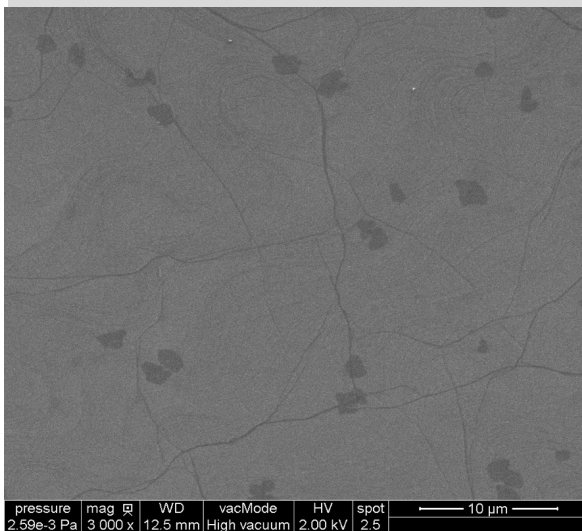
Monolayer Graphene on 90nm SiO₂/Si

Raman Spectrum



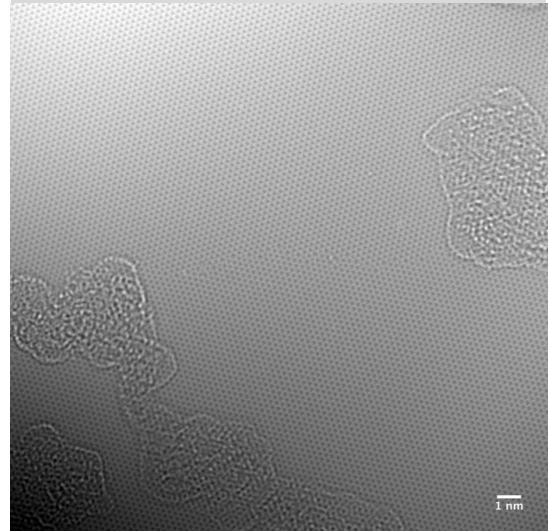
- Monolayer Graphene on 90nm SiO₂/Si
- Measured with 453nm laser wavelength on a substrate with 1-100 Ohm cm resistivity
- I(G)/I(2D)<1
- I(D)/I(G)<0.1

SEM image



Monolayer Graphene on 300nm SiO₂/Si

HRTEM image



Suspended graphene on TEM grids