



# CVD Graphene on Cu foil

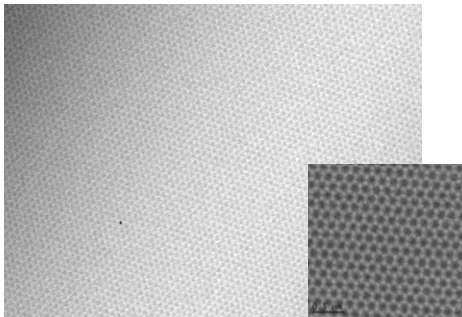
## Ultra-Clean Graphene on SiO<sub>2</sub>/Si Wafer



10mm X 10mm, 10ea

Product Size	Up to 90 x 90 mm <sup>2</sup> (Max)
Film Morphology	Continuous Monolayer (>95%)
Sheet Resistance	Av. < 250~400 $\Omega$ /sq
Mobility	>3500 cm <sup>2</sup> /Vs (Max. 17,000 cm <sup>2</sup> /Vs)
Transmittance	>97%
Substrate	SiO <sub>2</sub> (300nm)/Si wafer (Standard)
Domain Size	10-20 $\mu$ m

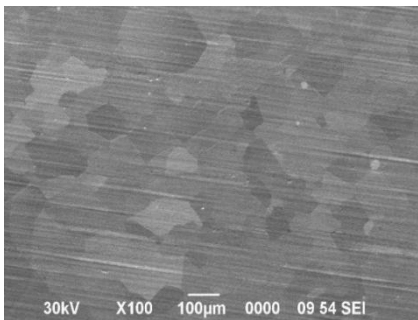
### High-Resolution TEM Images



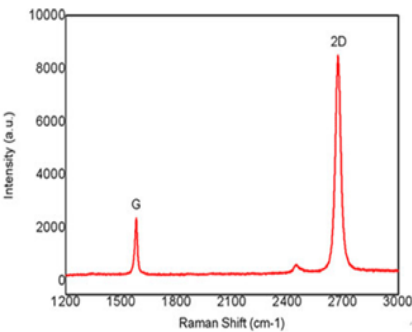
### Substrate specifications

Orientation	<100>
Thickness	525 $\pm$ 25 $\mu$ m
Oxide Thickness	300nm
Type/Dopant	P/Boron
Resistivity	Resistivity

### SEM Image of Graphene on Cu

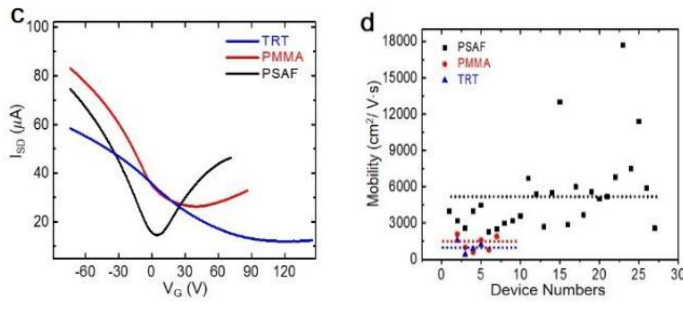


### Raman Spectrum

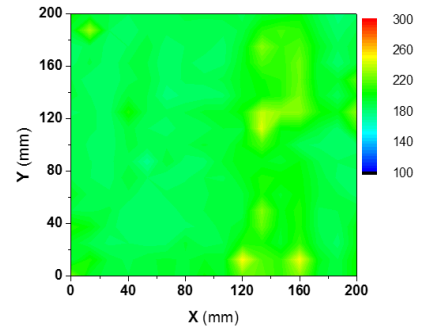




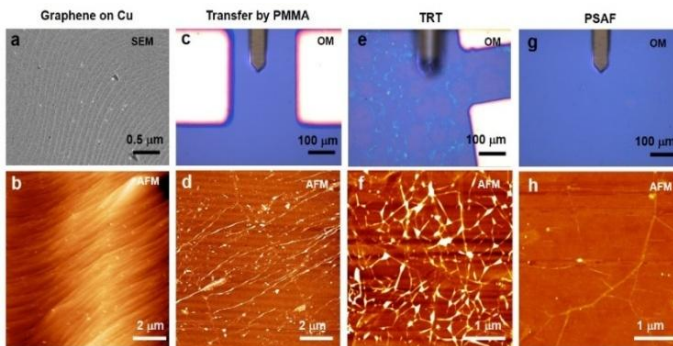
## Electrical Properties



## Sheet Resistance Uniformity



## Ultra-Clean Transfer by Pressure Sensitive Adhesive Films



## Reference

- (1) S. Kim *et al.* Ultra-Clean Patterned Transfer of Single-Layer Graphene by Recyclable Pressure Sensitive Adhesive Films. *Nano Lett.* (accepted).
- (2) S. Bae\*, H. Kim\* *et al.* Roll-to-roll production of 30 inch graphene films for transparent electrodes *Nature Nanotech.* **5**, 574 (2010).