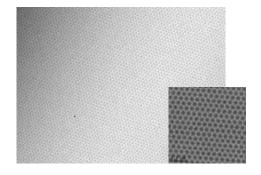
# **Graphene on PET**



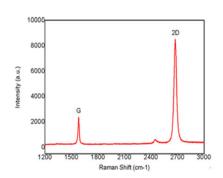


Product Size	Up to 500x600mm²
Film Morphology	Continuous Monolayer (>95%)
Sheet Resistance	Av. < 250~400 Ω/sq
Mobility	>3500cm2/Vs
Transmittance	>97%
Substrate	PET (188μm) (Standard)
Domain Size	10-20 $\mu$ m

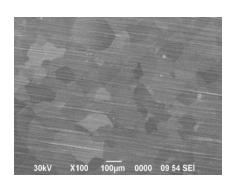
# **High-Resolution TEM Images**



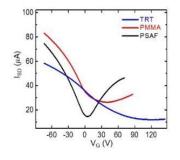
## **Raman Spectrum**

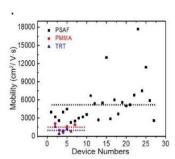


## **SEM Image of Graphene on Cu**



# **Electrical Properties**



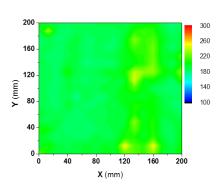




### Ultra-Clean Transfer by Pressure Sensitive Adhesive Films

# Graphene on Cu Transfer by PMMA TRT PSAF A SEM C OM C OM G OM G OM 100 µm 100 µm 100 µm 100 µm 1 µm

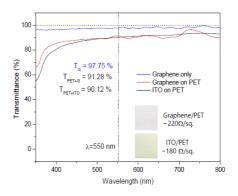
### **Sheet Resistance Uniformity**



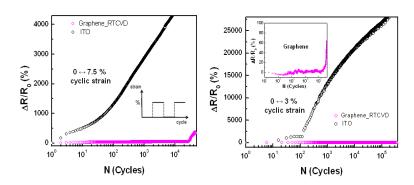
### Application of Graphene on PET for Flexible Touch Screen



#### **Optical Transmittance**



### **Mechanical Properties of Graphene on PET**



### 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).
- (3) J.-H. Ahn & B. H. Hong Graphene for displays that bend. Nature Nanotech. 9, 737-738 (2014).