Highly Ordered Pyrolytic Graphite
ZYB Quality

Product No. 626-1

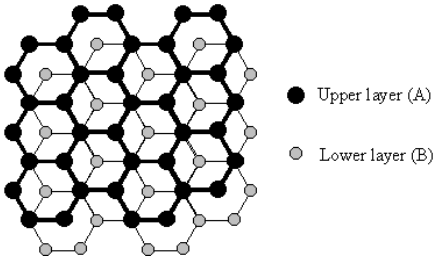

Fig. 1 Positional relationship between two identical graphene planes A and B. Graphite structure can be described as an alternate succession of these planes ...ABABAB...

Graphite consists of identical staked planes (Fig. 1.). A single plane of carbon atoms connected with shortest bonds is called "graphene". Highly Ordered Pyrolytic Graphite is a material of outstanding regularity and smoothness at nanoscale (Fig. 2.).

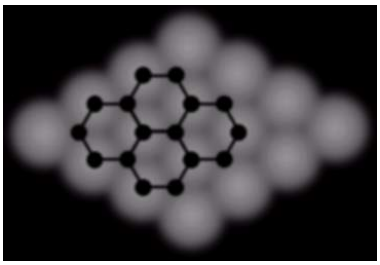

Fig. 2. Typical STM image of HOPG surface. Corresponding fragment of graphene structure is superimposed.

APPLICATIONS:

- Scanning Tunneling Microscopy calibration samples
- SPM substrates
- Monochromators
- X-Ray diffractometry
- Neutron Scattering experiments and diffractometry

SPECIFICATIONS:

- ZYB Quality / Mosaic Spread 0.8°±0.2° / Grain size up to 1µm /Substrate Size 1x7x7 mm
- Density: 2.266 g/cm^3
- Thermal conductivities:
  along C axis (0001): 8±2 Watt/mK
  along surface plane: 1800±200 Watt/mK

The non-usable, non-oriented base layer can be up to 1mm thick and is marked with a clear tape.

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