

**Highly Ordered Pyrolytic Graphite
ZYB Quality**

Product No. 626-1

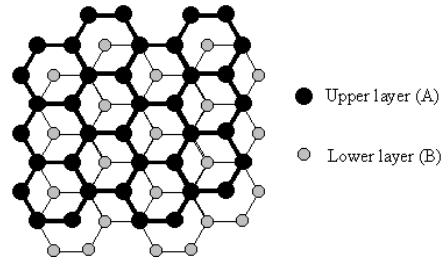


Fig. 1 Positional relationship between two identical graphene planes A and B. Graphite structure can be described as an alternate succession of these planes ...ABABAB...

Graphite consists of identical stacked 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.).

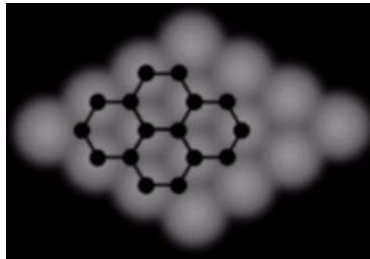


Fig. 2. Typical STM image of HOPG surface. Corresponding fragment of graphene structure is superimposed.

APPLICATIONS:

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

SPECIFICATIONS:

- ZYB Quality / Mosaic Spread $0.8^{\circ} \pm 0.2^{\circ}$ / Grain size up to $1\mu\text{m}$ / Substrate Size $1\text{x}7\text{x}7\text{ mm}$
- Density: 2.266 g/cm^3
- Thermal conductivities:
 - along C axis (0001): $8 \pm 2\text{ Watt/mK}$
 - along surface plane: $1800 \pm 200\text{ Watt/mK}$

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

626-1 TN V4 04212015

TED PELLA. INC.

Microscopy Products for Science and Industry

P.O. Box 492477, Redding, CA 96049-2477, U.S.A.
 Telephone: 530-243-2200; 800-237-3526 (U.S.A. or Canada) • FAX: 530-243-3761
 Email: sales@tedpella.com • Web Site: <http://www.tedpella.com>