Product Description

Highly Oriented Pyrolytic Graphite (HOPG) ZYA Quality, Mosaic Spread: 0.4 ± 0.1 degrees, double-sided, piece size - 8x10mm, thickness 1mm. Available size - till 50x50 mm. The best quality of the available HOPG types.

Double-sided HOPG can be used from both sides and its properties are not changed in depth. For single-sided piece the not working side is mat, glare less and can't be cleaved. The number of working side cleavages of one-sided piece is limited in comparison with double sided substrate. The properties for one-sided piece are changed in depth.

HOPG crystals are widely used as substrates in STM (Scanning Tunneling Microscopy). The most distinguishing features of HOPG which enable this application are a very smooth surface and electro conductivity.

HOPG has a layered structure which makes sample preparation very simple. By pressing a double-stick tape to a HOPG piece and peeling it off, one gets a fresh conductive surface which is very smooth. This surface can be examined in STM or serve as a substrate for other materials under investigation.

HOPG itself is an interesting object for STM investigations. One can measure the surface roughness, microscopic surface features, arrangement of the carbon atoms on the HOPG surface, etc. Besides, HOPG images at the atomic level can be used for calibrating STM for high-resolution imaging.

General Features

HOPG quality	ZYA
Mosaic spread	0.4 ± 0.1 degrees
Working side	double-sided
Piece size	8 x 10 mm
Piece thickness	1 mm