

Graphene Supermarket 铜基六角氮 化硼单层薄膜

中文名称： Graphene Supermarket 铜基六角氮化硼单层薄膜

英文名称： Single layer h-BN (Boron Nitride) film grown in copper foil

货 号： ML1173

CAS 号： 7440-42-8

包 装： 1 盒

参 数

面 积： 5cmx2.5cm

保质期： 6 月常温干燥避光

酶联生物为您提供高质量的铜基单层六角氮化硼薄膜，六角氮化硼结构是类石墨烯结构，具有很高的研究价值，也可以用转移石墨烯的方法转移六角氮化硼材料。表征完备，质量可靠。

Single layer h-BN (Boron Nitride) film grown in copper foil.

h-BN is an insulator with a direct band gap of 5.97 eV. Due to its strong covalent sp² bonds in the plane, the in-plane mechanical strength and thermal conductivity of h-BN has been reported to be close to that of graphene. h-BN has an even higher chemical stability than graphene; it can be stable in air up to 1000 ° C (in contrast, for graphene the corresponding temperature is 600 ° C).

During Chemical Vapor Deposition, BN is grown on both sides of the copper foil

Specifications:

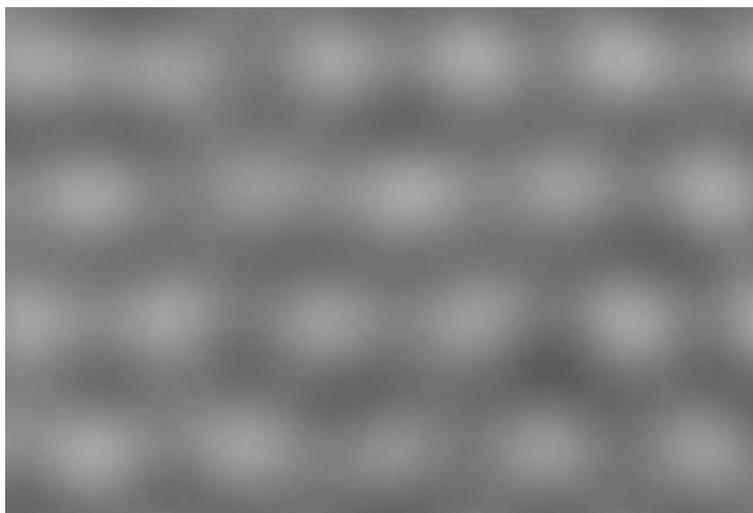
Close to complete coverage (90-95%), with some minor holes

Thickness of the copper foil is 20 microns

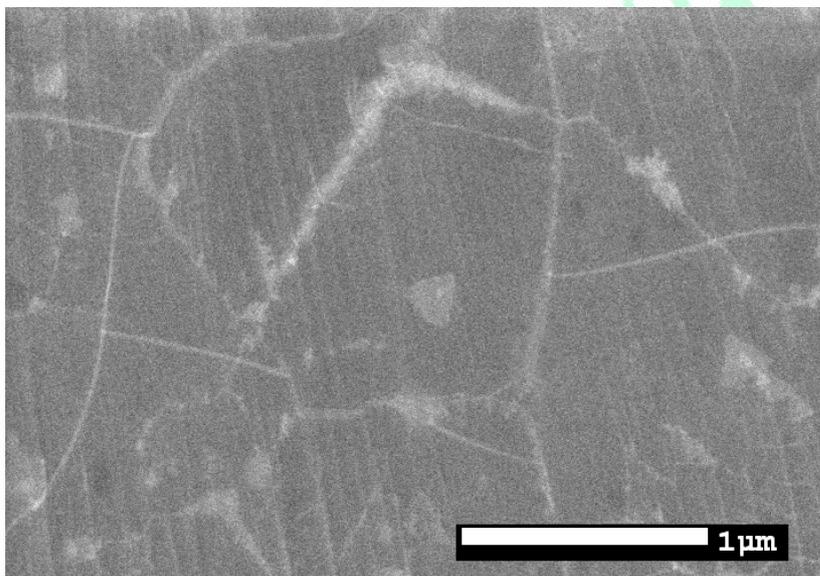
High crystalline quality, see SAD (Selected area [electron] diffraction) data

Quality is confirmed by TEM.

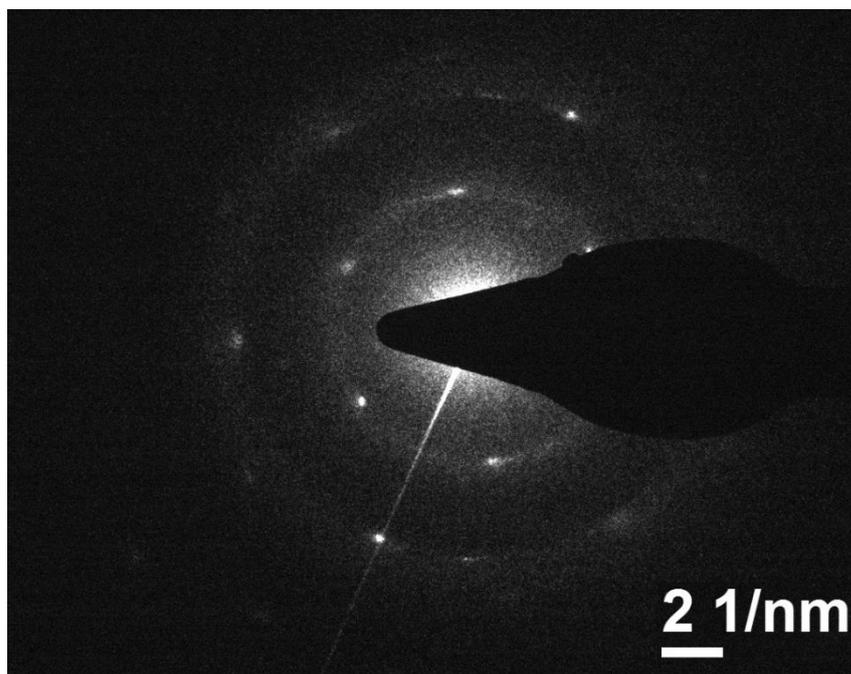
TEM shows perfect hexagonal structure.



On SEM image (below), BN is seen as wrinkles on top of the copper foil.

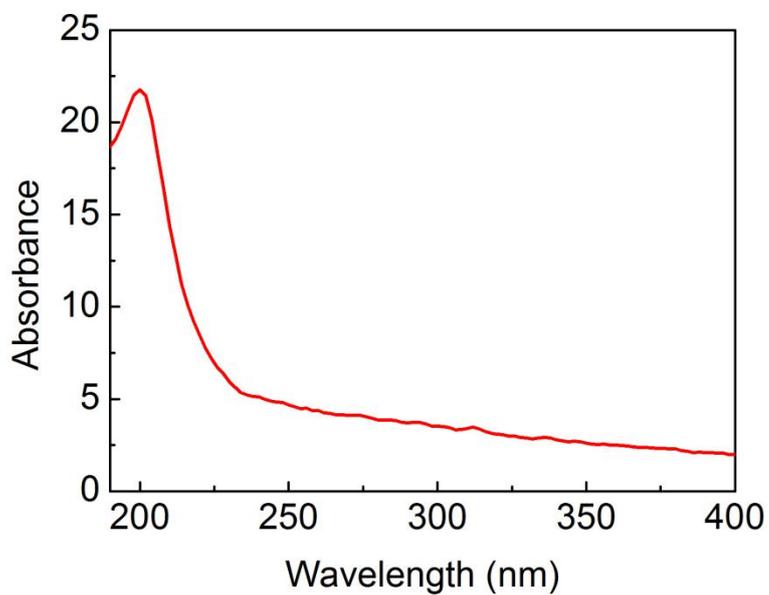


SAD data of h-BN



If transferred onto an SiO₂ substrate, the BN film may be seen as a white film. However, it is difficult to recognize the BN film on copper using a microscope.

Absorbance data BN on copper



Transfer: PMMA Procedure, similar to that of graphene. It may be transferred on most substrates, which we may do in-house as custom work.