



Technical Data Sheet

ACS Material Black Phosphorus Crystal

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1. Preparation Method

CVD Method

2. Characterizations

Composition:	Black Phosphorus Crystal
Appearance:	Sheet-like particle structure with metal-like luster
Particle Size:	Width: several mm Length: 1 cm
Package:	Vacuum silica tube (8 cm)

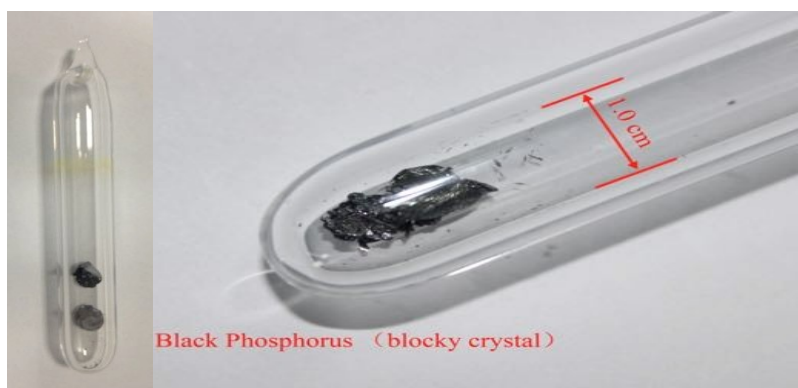
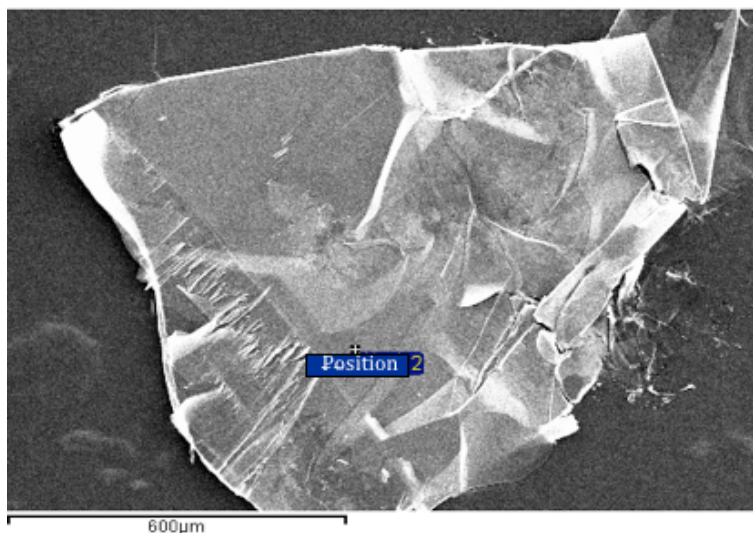
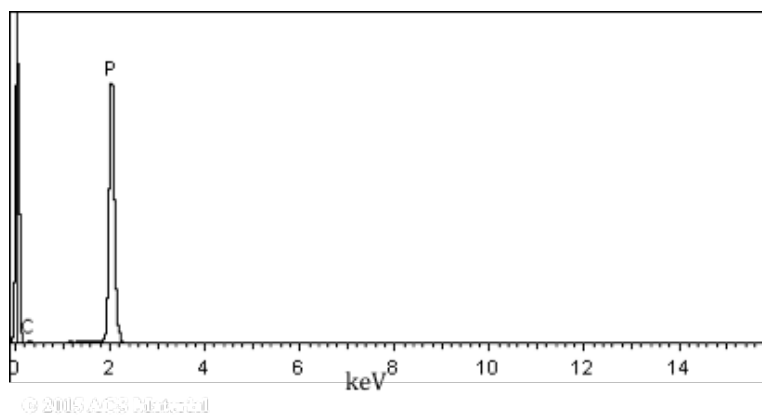


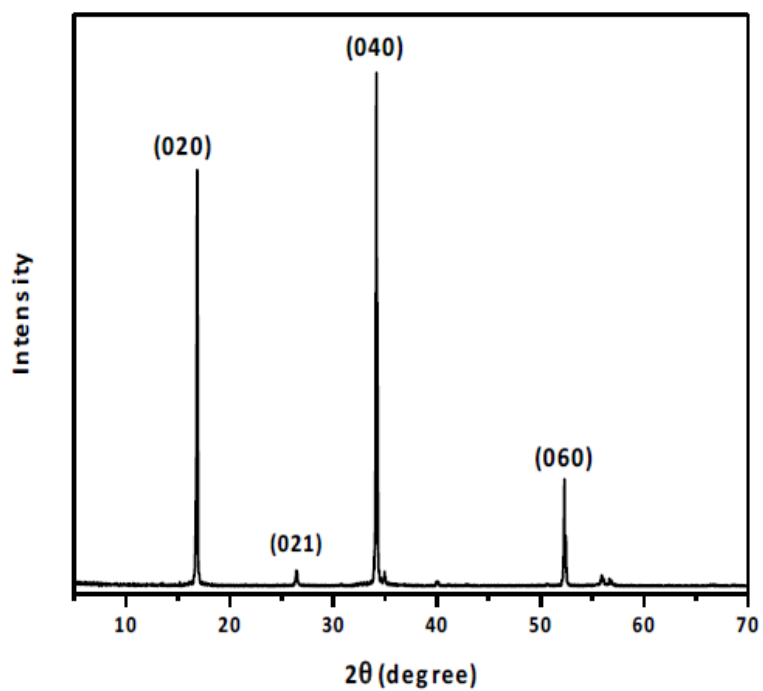
Image of ACS Material Black Phosphorus Crystal



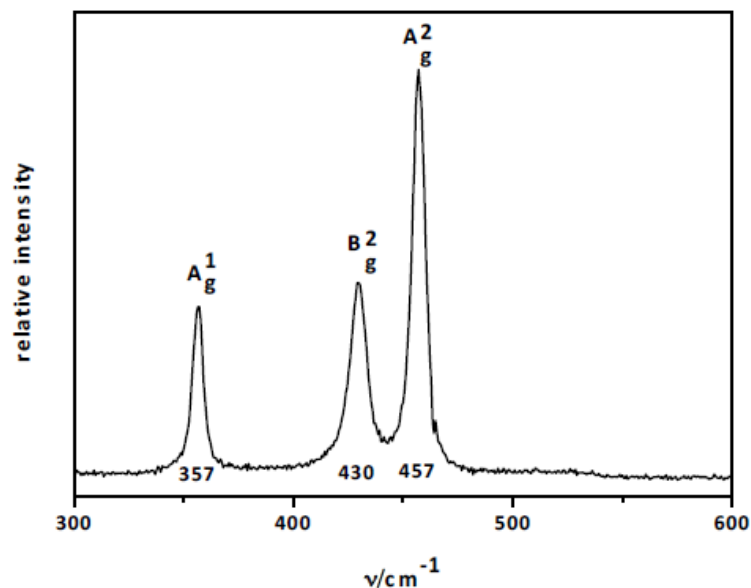
Typical SEM Image of ACS Material Black Phosphorus Crystal



EDX Pattern of ACS Material Black Phosphorus Crystal in the above SEM image



XRD Pattern Image of ACS Material Black Phosphorus Crystal



Raman Spectrum Image of ACS Material Black Phosphorus Crystal

3. Application Fields

Compared with other allotropes of phosphorus (white and red phosphorus), black phosphorus powder is a thermodynamic stable semiconductor material. It can be widely used in photocatalysis, photo-degradation, and other photo-voltage effects.

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