



Product Datasheet

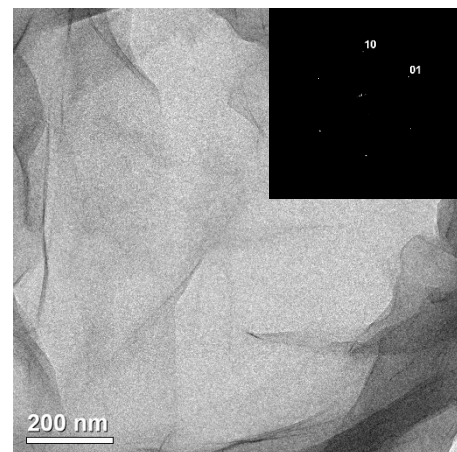
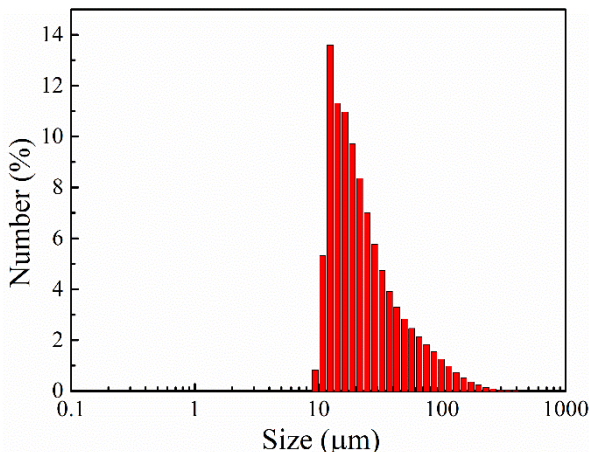
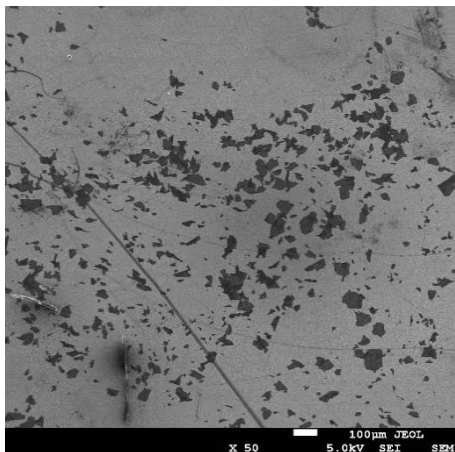
Brominated graphene (Br-Graphene, Powder)

Properties

Color:	Black
Dispersibility in solvents:	Dispersible in Alcohols, Chloroform, Tetrahydrofuran via 1-2 minutes of sonication
Dispersion stability:	Medium (up to few hours). It is recommended to 1-2 min sonication before using of dispersion
Platelets Size: (Laser Diffraction & SEM images)	d90: 36.7-41.3 μm
	d50: 12.4-14.6 μm
	d10: 9.1-9.8 μm
Number of layers, single platelet: (TEM and XRD Data)	>80% Monolayer platelets
Crystalline quality, single platelet: (TEM)	High (absence of nanoscale holes and rips)
Conductivity (four probe method):	$\approx 200 \text{ S/m}$
Storage conditions: at a temperature of 3-5 °C, without access of the light, with a tightly closed lid.	

Chemical Composition

Elemental composition: (Elemental analysis & XPS)	C: _____ 80.1-86.4 at.%
	O: _____ 6.3-9.7 at.%
	Br: _____ 7.3-8.2 at.%
	N, S: _____ <0.5 at.%
	Other Impurities: _____ <0.5 at.%
C/O ratio: (XPS)	11.8-17.2
Functional groups composition: (XPS & FTIR)	C(sp ²): _____ 85.1-88.5 at.%
	C-OH&C-O-C: _____ 3.1-4.8 at.%
	C=O: _____ 1.5-2.1 at.%
	COOH: _____ 1.2-1.5 at.%
	C-Br: _____ 5.7-6.4 at.%

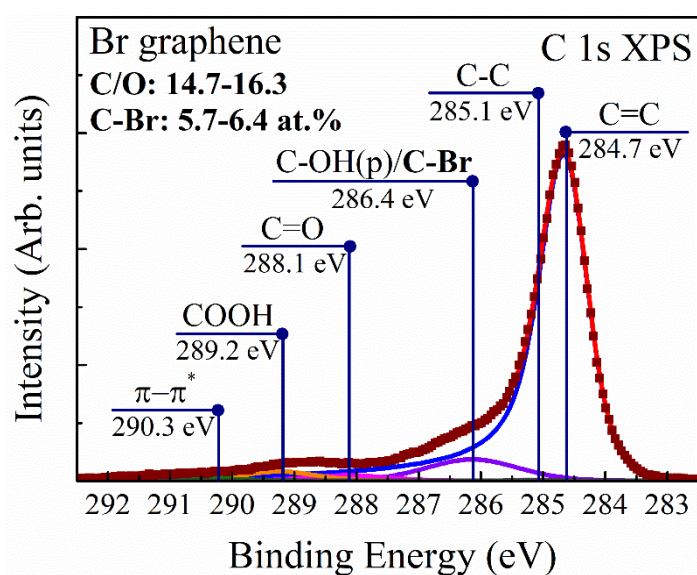
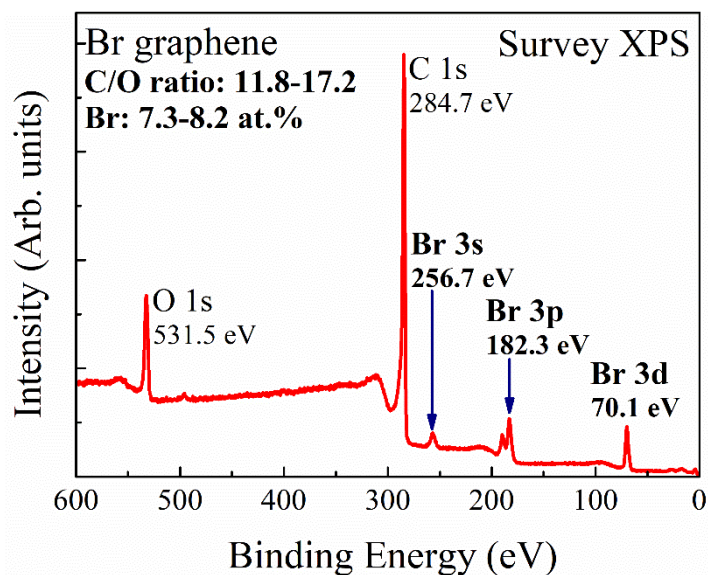


SEM Image

Size Distribution*

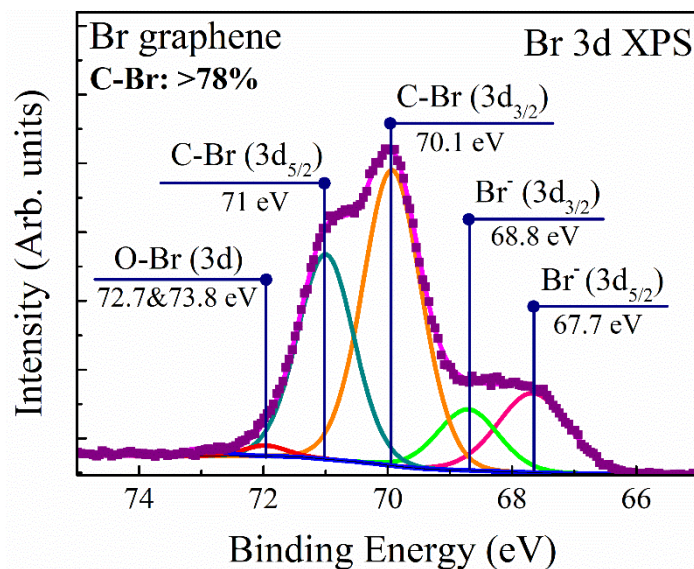
TEM image and SAED

*according to both Laser Diffraction and SEM analysis



Survey XPS

C 1s XPS



Br 3d XPS