



## Product Datasheet

### N-doped Graphene

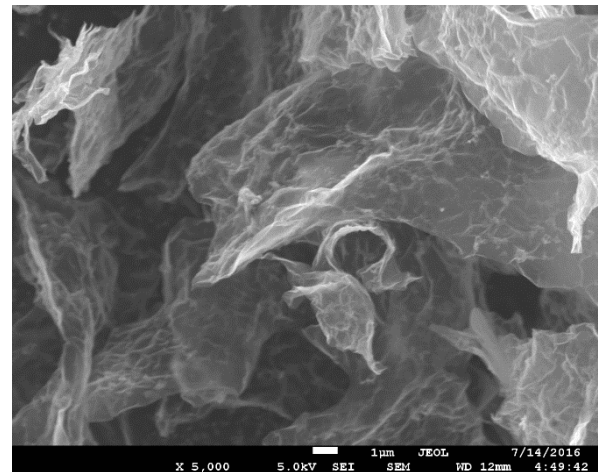
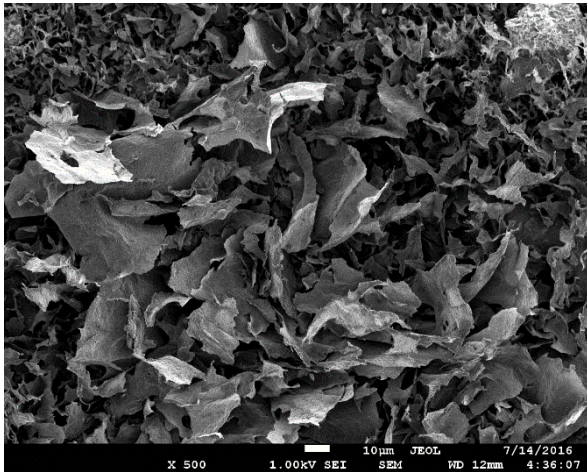
(reduced graphene oxide, N-rGO, aerogel)

#### Properties

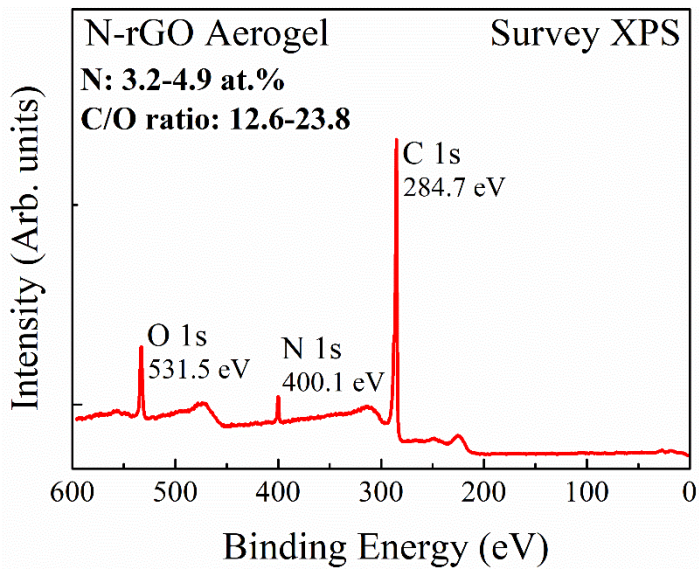
<b>Color:</b>	Black
<b>Density:</b>	5-7 mg/cm <sup>3</sup>
<b>Surface area (BET):</b>	1000-1500 m <sup>2</sup> /g
<b>Approximate dimensions:</b>	d=3-5 mm (balls) d=12mm h=20 mm (columns)
<b>Dispersibility in solvents:</b>	High (sonication)
<b>Conductivity:</b>	≈ 800 S/m
<b>Dispersibility in solvents:</b>	Dispersible in Alcohols, Tetrachloromethane, Tetrahydrofuran, Toluene via 1-2 minutes of sonication
<b>Dispersion stability:</b>	Stability strongly depends on solvent. It is recommended to 1-2 min sonication before using of dispersion

#### Chemical Composition

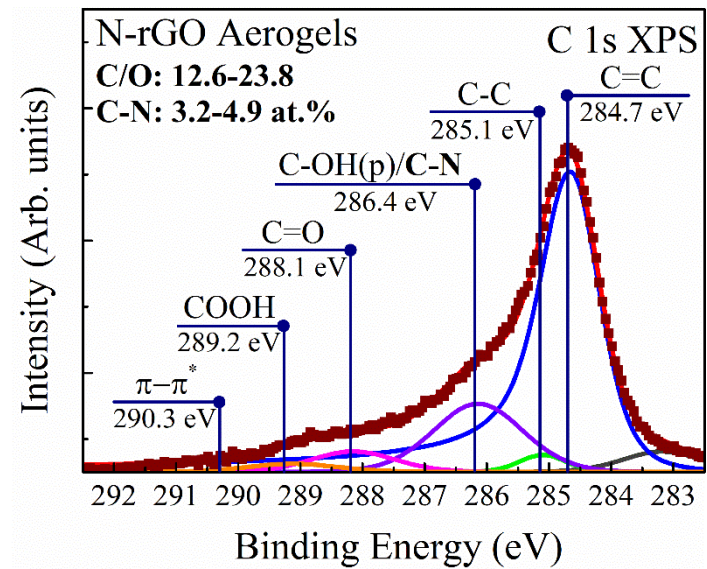
<b>Elemental composition: (Elemental analysis &amp; XPS)</b>	C:	86.7-90.7 at.%
	O:	6.1 -7.4 at.%
	N:	3.2-4.9 at.%
	S:	<0.5 at.%
	Other Impurities:	<0.5 at.%
<b>C/O ratio: (XPS)</b>	12.6-15.0	
<b>Functional groups composition: (XPS &amp; FTIR)</b>	C(sp <sup>2</sup> ):	87.6-90.9 at.%
	C-OH&C-O-C:	3.3-4.1 at.%
	C=O:	1.4-1.9 at.%
	COOH:	1.2-1.5 at.%
	C-N:	3.2-4.9 at.%



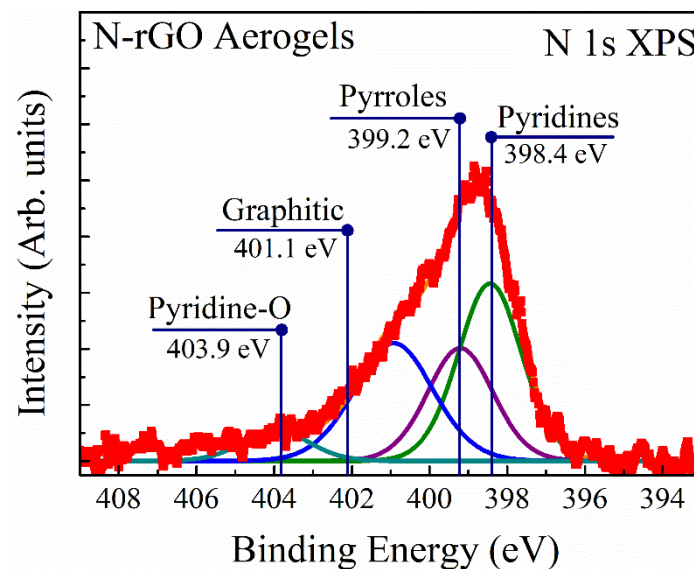
SEM Images



Survey XPS



C 1s XPS



N 1s XPS