



Technical Data Sheet

ACS Material Industrial Thin Layer Graphene Nanoplatelets

Table of Contents

[1 – Characterizations](#)

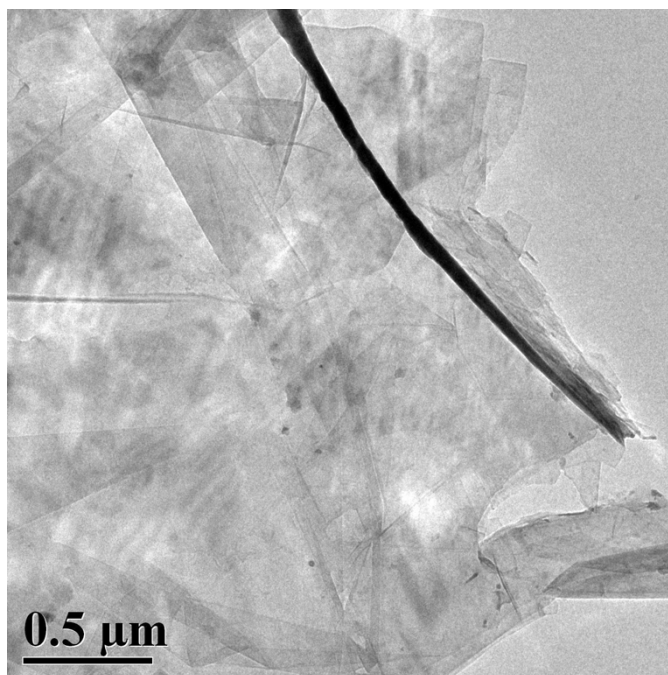
[2 – Application Fields](#)

Contact Information:

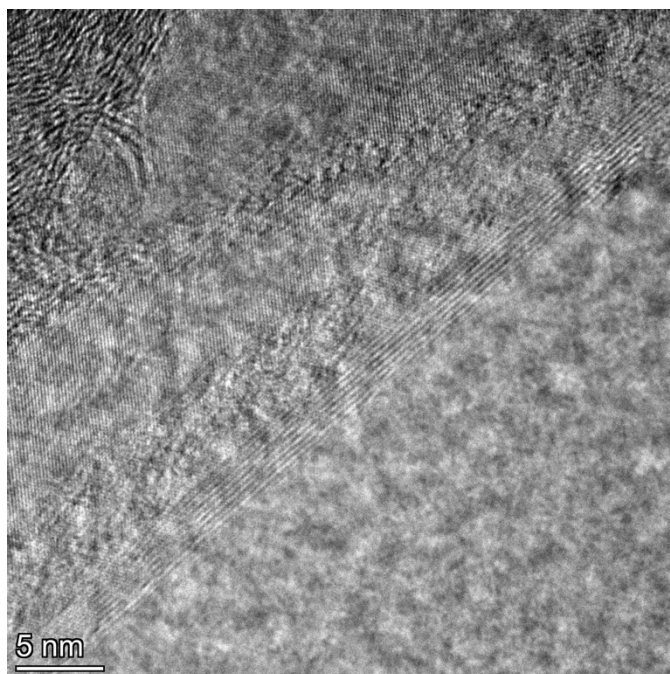
Manufacturer: ACS Material, LLC.
Address: 959 E Walnut St., Suite 100
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Revision: 030223

1. Characterizations

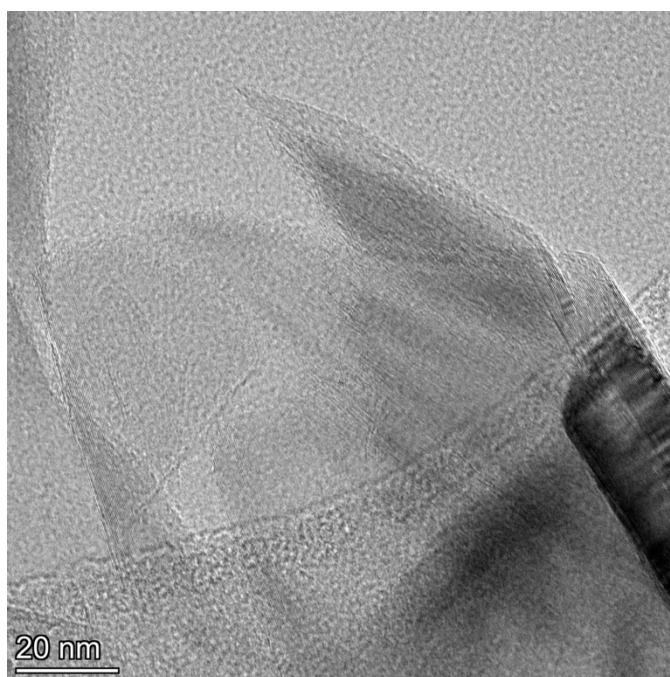
Type	Type A	Type B	Type C
Appearance	Black/Grey Powder	Black/Grey Powder	Black/Grey Powder
Diameter	1-5 μm	1-6 μm	1-10 μm
Thickness	1-6 nm	1-4 nm	2-3 nm
Tap Density	0.04-0.07 m^3/g	0.056-0.062 m^3/g	0.04-0.06 m^3/g
Apparent Density	0.06-0.10 m^3/g	0.33-0.038 m^3/g	0.03-0.05 m^3/g
Electrical Conductivity	800-1100 S/m	800-1200 S/m	500-600 S/m
Carbon Content	>99%	>99%	>99%
Water Content	<2 wt. %	<2 wt. %	<2 wt. %
Residual Impurities	<1 wt. %	<1 wt. %	<1 wt. %
Particle Size Distribution (D50)	D50= $\sim 26.03\mu\text{m}$	D50= $\sim 16.01\mu\text{m}$	D50= $\sim 9\mu\text{m}$



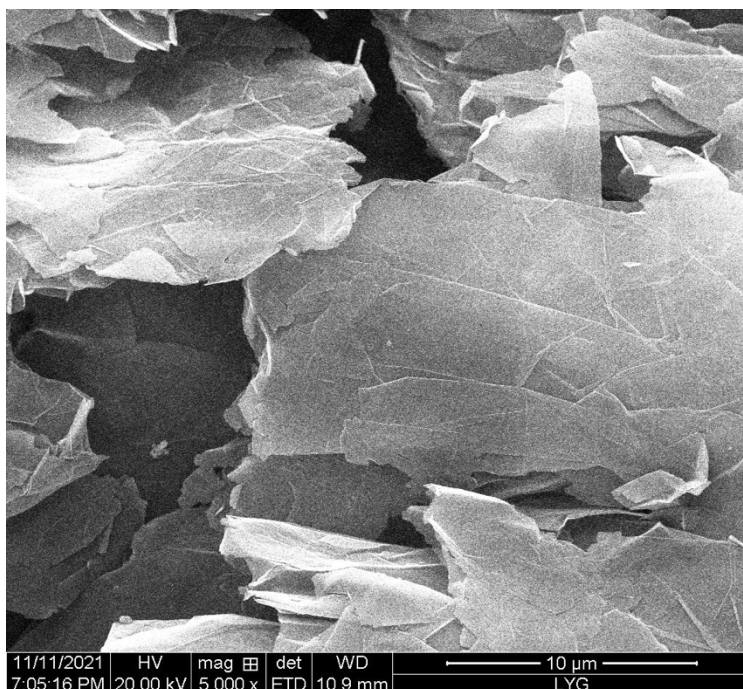
Typical TEM Image (1) of ACS Material Industrial Thin Layer Graphene Nanoplatelets (Type A)



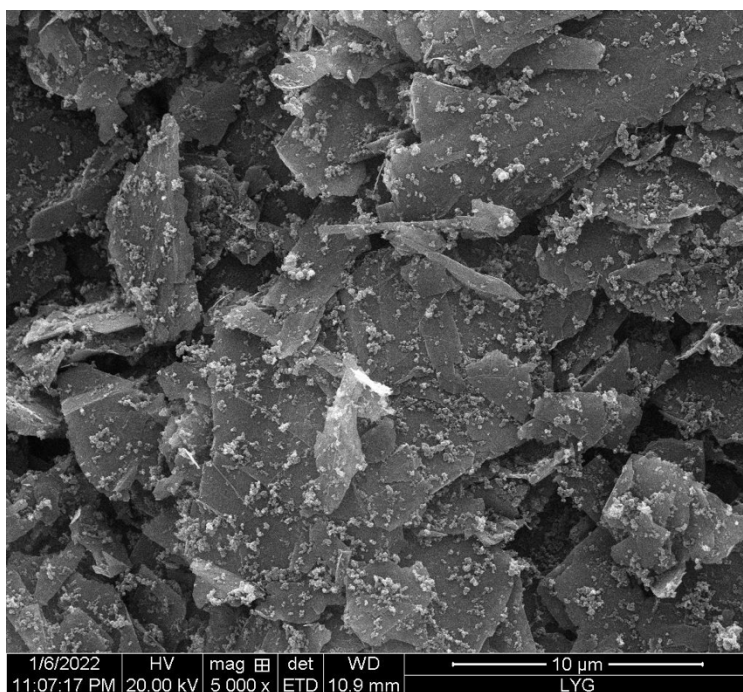
Typical TEM Image (2) of ACS Material Industrial Thin Layer Graphene Nanoplatelets (Type B)



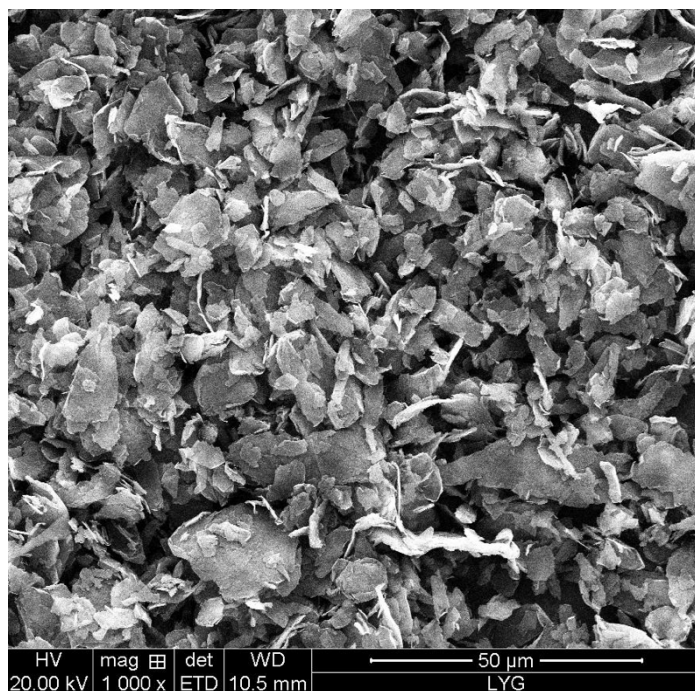
Typical TEM Image (3) of ACS Material Industrial Thin Layer Graphene Nanoplatelets (Type C)



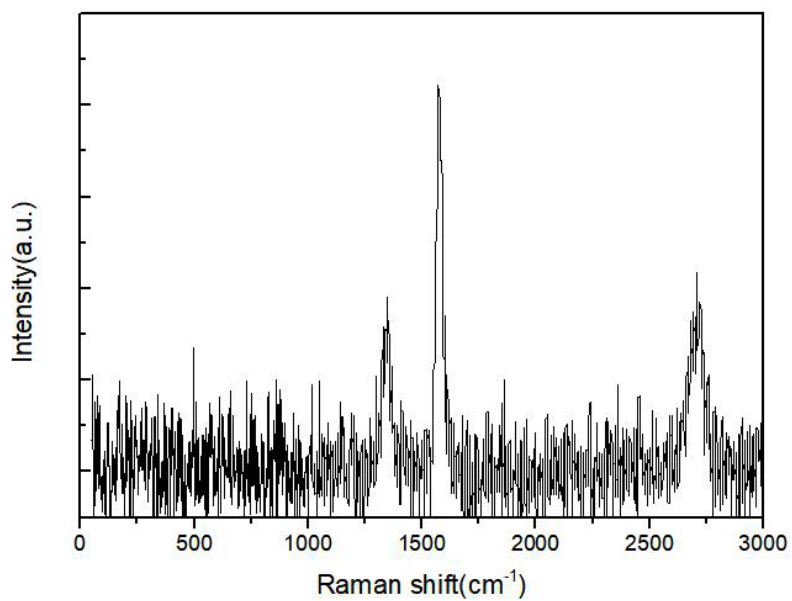
Typical SEM Image (4) of ACS Material Industrial Thin Layer Graphene Nanoplatelets (Type A)



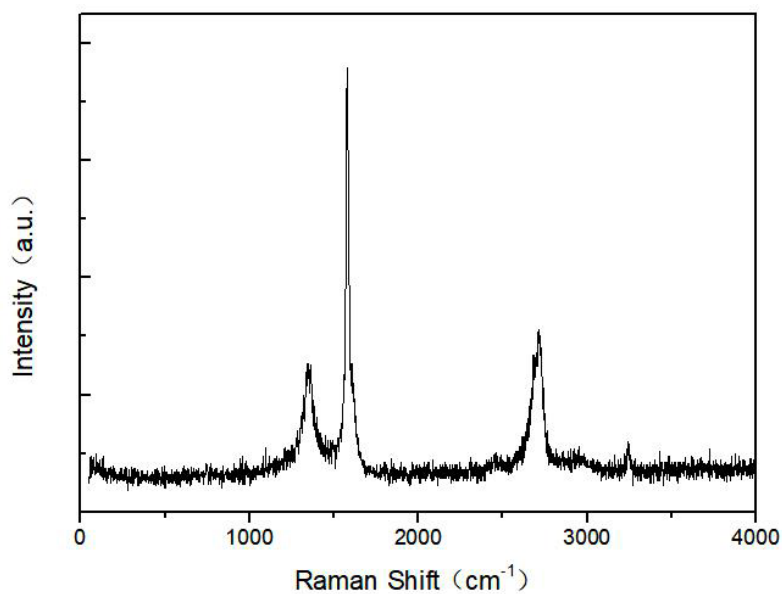
Typical SEM Image (5) of ACS Material Industrial Thin Layer Graphene Nanoplatelets (Type B)



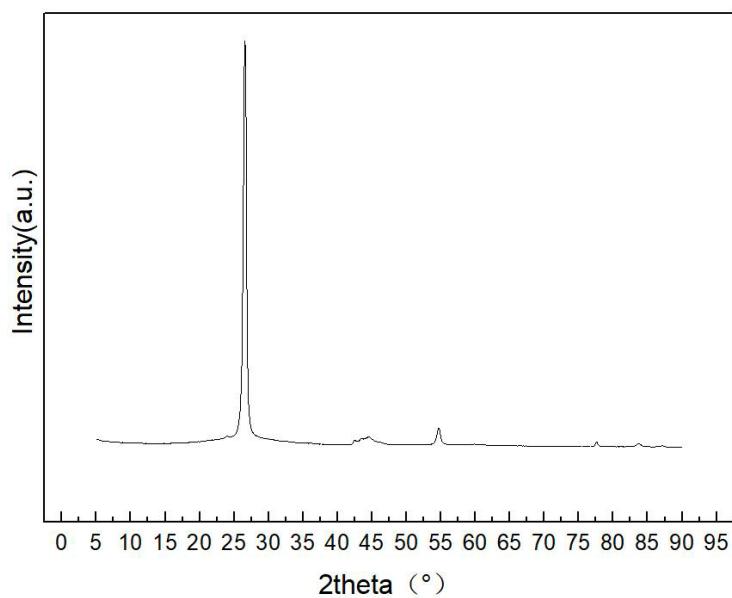
Typical SEM Image (6) of ACS Material Industrial Thin Layer Graphene Nanoplatelets (Type C)



Raman Spectrum of ACS Material Industrial Thin Layer Graphene Nanoplatelets (Type A)



Raman Spectrum of ACS Material Industrial Thin Layer Graphene Nanoplatelets (Type B)



Raman Spectrum of ACS Material Industrial Thin Layer Graphene Nanoplatelets (Type C)

2. Application Fields

New energy battery, anti-static, heat elimination, improve mechanical strength, conductive composites, coating modifiers, basic physics research, graphene transistors, electronic chips, antenna materials, aerospace, etc.

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