



Technical Data Sheet

ACS Material Imidazole-Modified Graphene Quantum Dots

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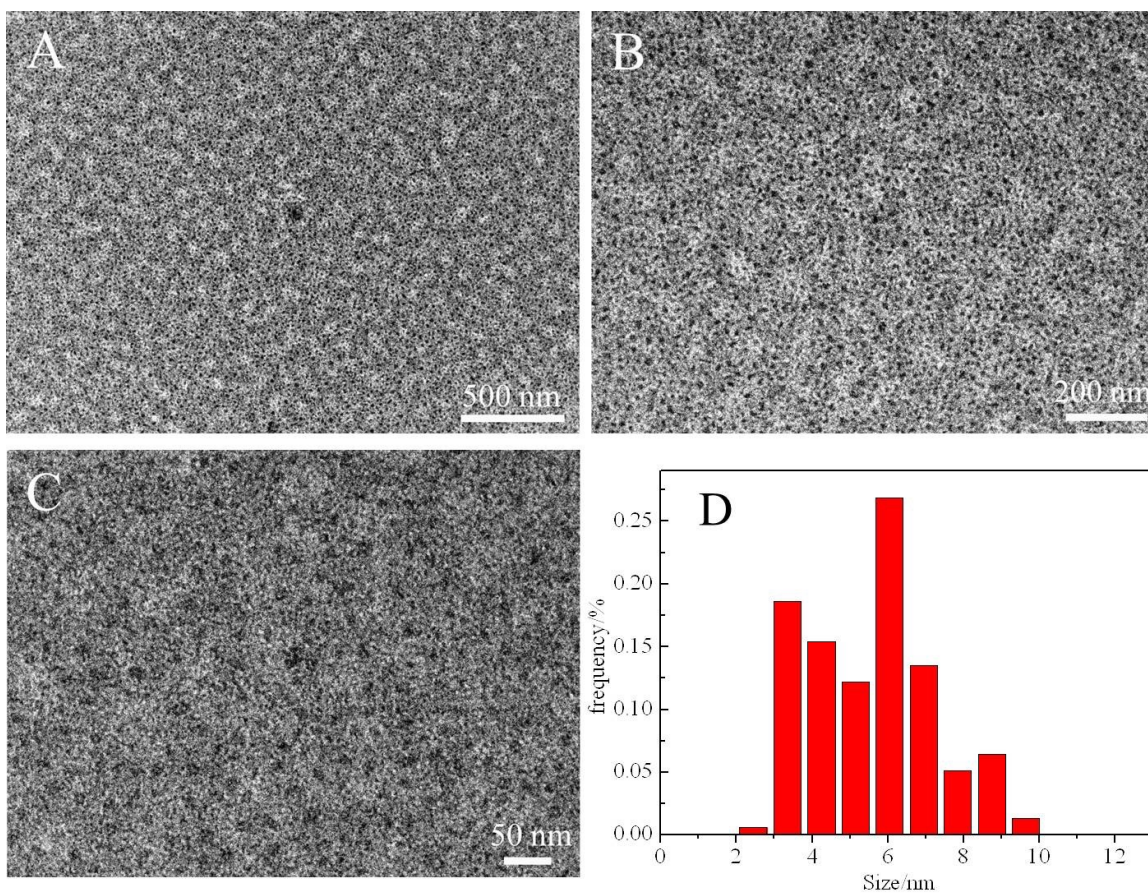
Revision: 030217

1. Preparation Method

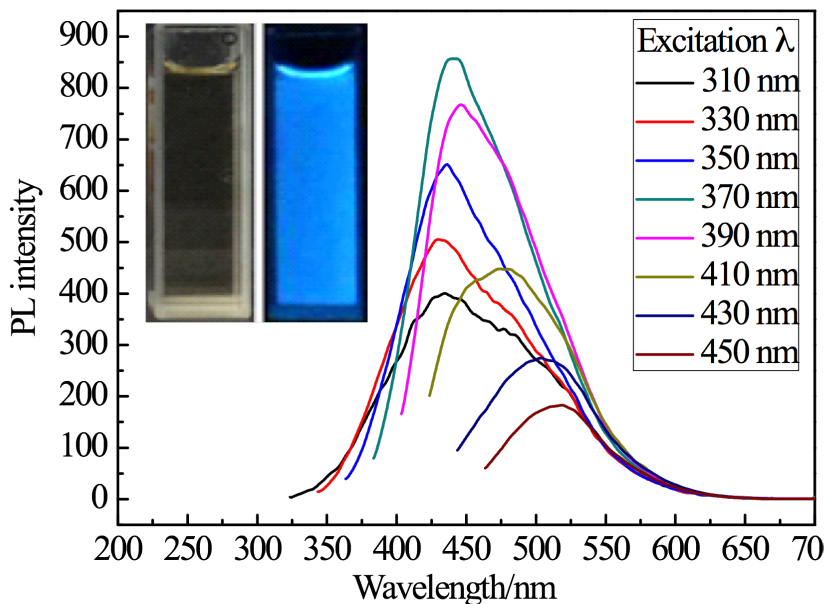
Acid Reflux Method

2. Characterizations

Composition:	Imidazole-Modified Graphene Quantum Dots
Appearance:	Brownish black powder or solution
Photoluminescent Color:	Blue
Fluorescence Quantum Yield:	$10 \pm 2\%$
Particle Size:	6 ± 3 nm
Concentration:	1 mg/ml, maximum: 10 mg/ml
Solvent:	Water
Zeta Potential:	$\sim +20$ mV
Purity:	$>80\%$
Storage:	Store product sealed in a cool dry place.



(A)(B)(C) TEM graphs (D) particle size distribution histogram of ACS Material Imidazole-Modified GQDs



Typical Fluorescence spectra Image of ACS Material Imidazole-Modified GQDs

Table.1 Element analysis of ACS Material Imidazole-Modified GQDs

Element	Content percentage (%)
C	42.41
H	5.59
N	14.03
C/N	3.02

3. Application Fields

This product emits blue fluorescence and is widely applied in various fields such as fluorescent ink, ionic detection and lube additives etc.

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