

Technical Specification of Quantum Dots with Carboxylic Acid Group

Description: QSH is a group of water soluble alloy CdSSe/ZnS or CdSe/ZnS core/shell quantum dots with amphiphilic polymer coating. Their surface functional group is carboxylic acid. The zeta potential of QSH is from -30mV to -50mV. Their organic layers consist of a monolayer of oleic acid/octadecylamine and a monolayer of amphiphilic polymer. The thickness of the total organic layers is about 4 nm. The hydrodynamic size of the QDs is about 8-10 nm larger than their inorganic core size measured by TEM. QSH is very stable in most buffer solutions in the pH range of 5-10.

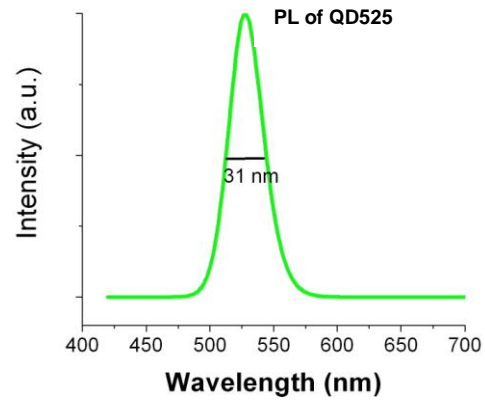
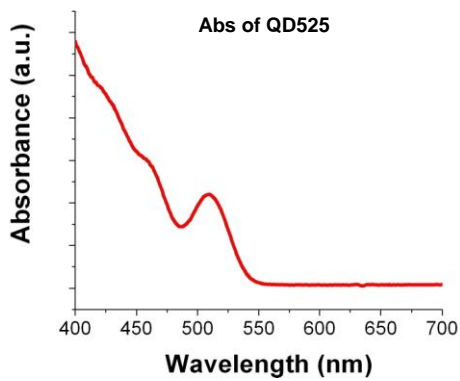
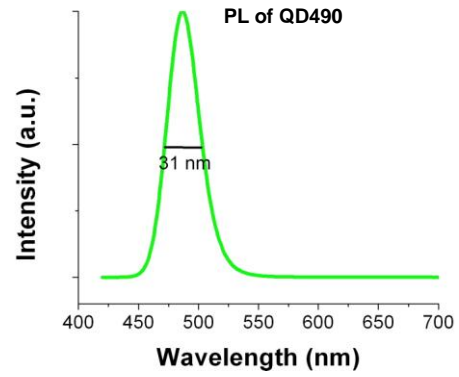
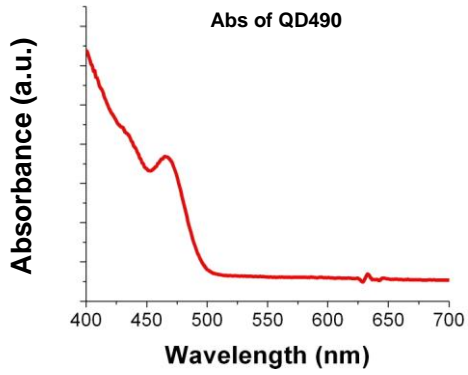
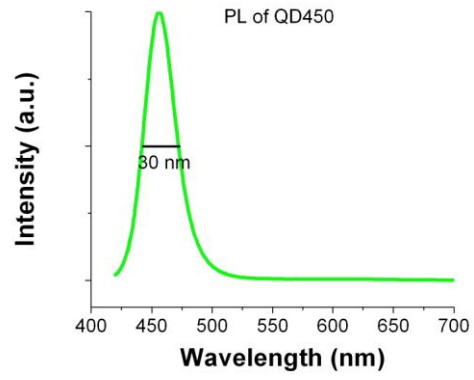
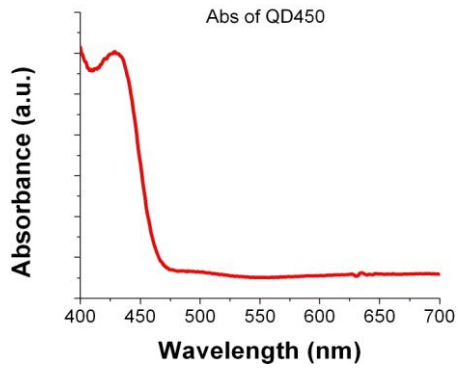
Catalog number: QSH
Product name: CdSSe/ZnS or CdSe/ZnS core/shell QDs with carboxylic acid group.
Solvent: Water
Reaction group: Carboxylic acid
Storage: 4°C; Do not freeze.
pH stability: 5-10
Buffer stability: Borate, Tris, HEPES, PBS, MES, etc.
Shelf life: 6 months
Concentration: 8.0 uM

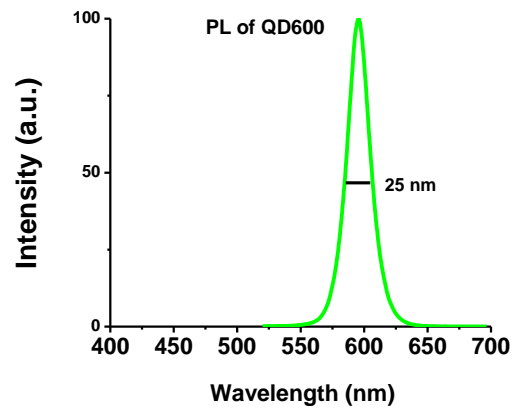
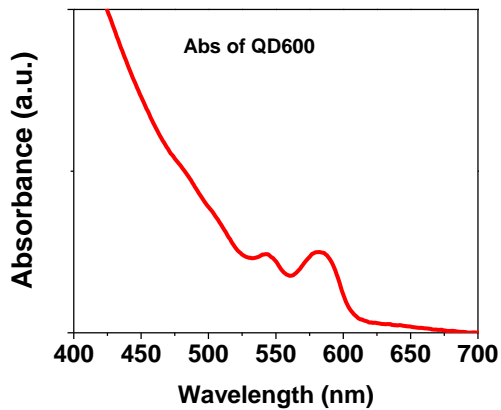
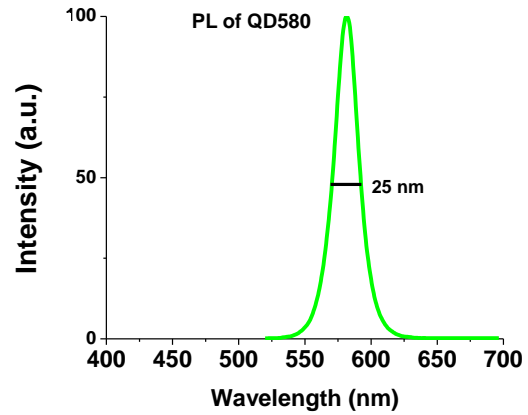
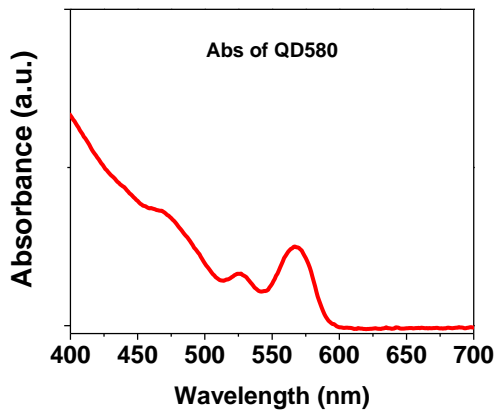
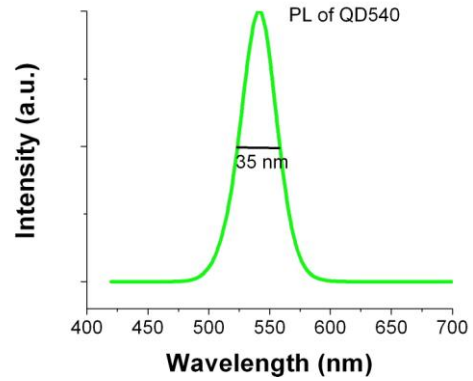
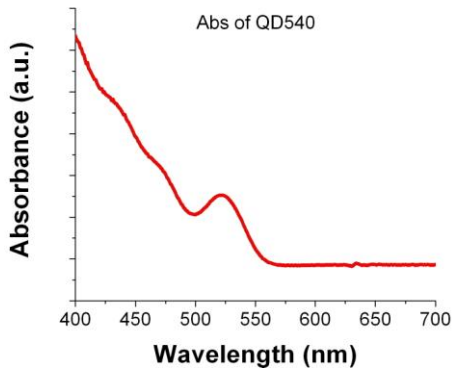
	QSH450	QSH490	QSH525	QSH540	QSH580	QSH600	QSH620	QSH645	QSH665
Emission (nm)	450	490	525	540	580	600	620	645	665
Peak Tolerance (nm)	10	10	10	10	10	10	10	10	10
FWHM (nm)*	<35	<35	<35	<35	<25	<25	<25	<35	<35
Emission Efficiency**	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%
Surface Coating	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer

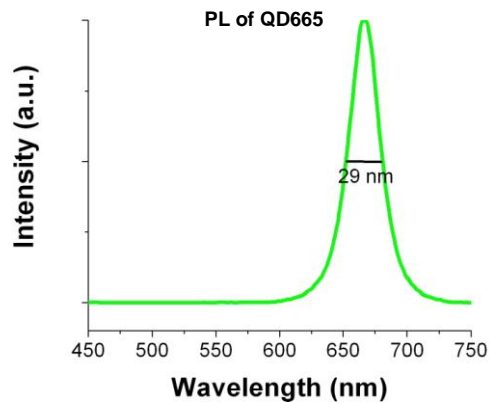
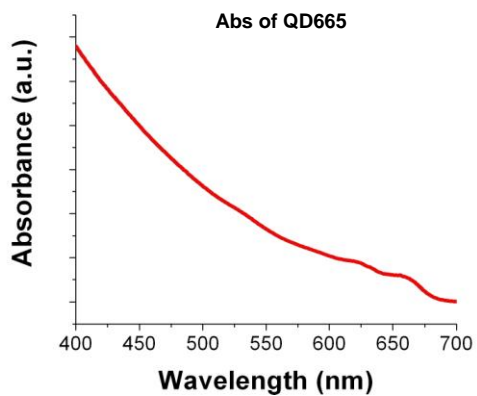
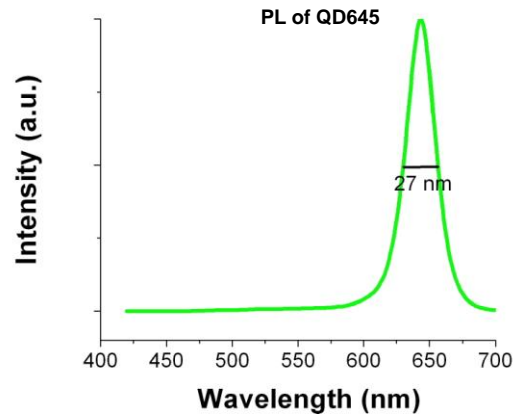
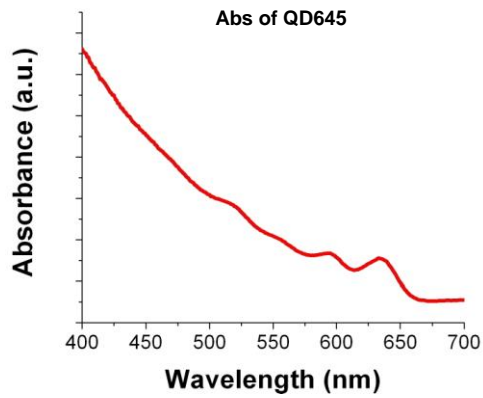
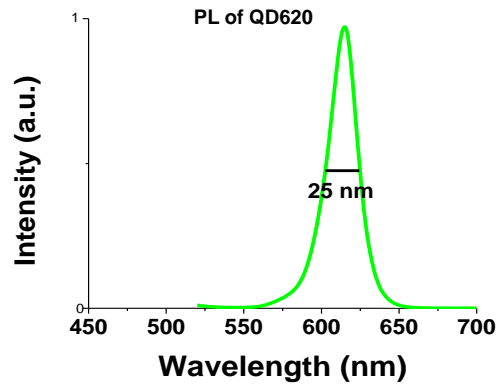
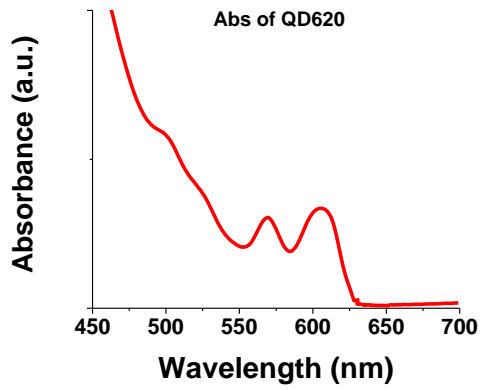
*FWMH: Full Width of Half Maximum:

**Emission efficiency was measured by integrating sphere.

Spectra:









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