

Technical Specification of Quantum Dots with PEG coating

Description: QMG is a group of water soluble alloy CdSSe/ZnS or CdSe/ZnS core/shell quantum dots with amphiphilic polymer and PEG coating. There is not any functional group on the surface of the QDs. The zeta potential of QMG is from -30mV to 0. The thickness of the total organic layers is about 6 nm. The hydrodynamic size of the QDs is about 12-14 nm larger than their inorganic core size measured by TEM. The colloidal stability of QMG is exceptionally high. It is stable in most buffer solutions in the pH range of 5-10.

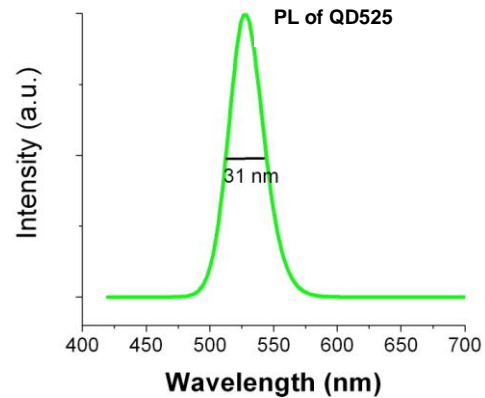
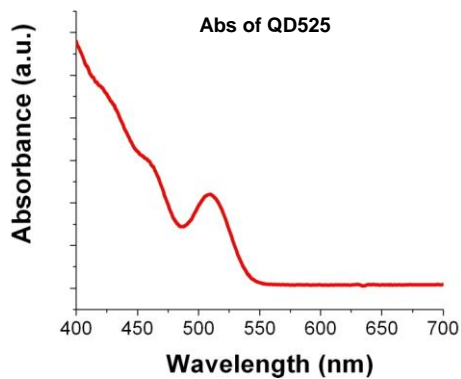
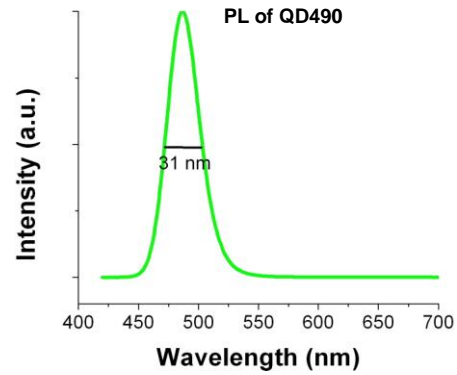
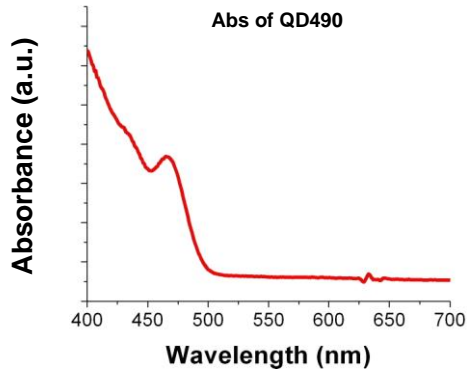
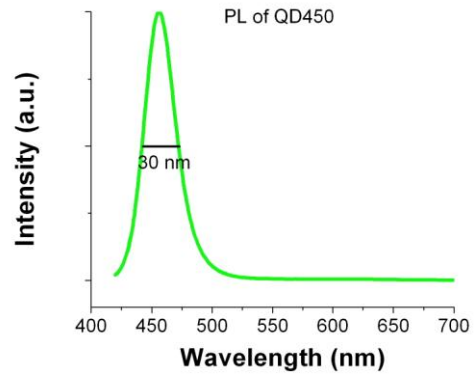
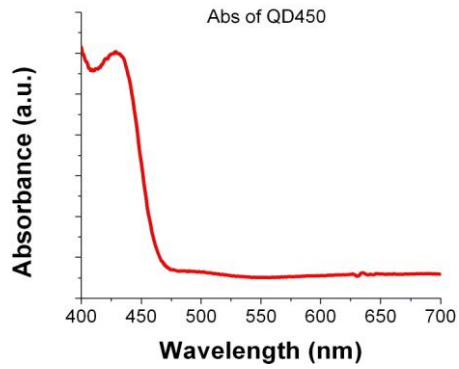
Catalog number: QMG
Product name: CdSSe/ZnS or CdSe/ZnS core/shell QDs with PEG
Solvent: Water
Reaction group: none
Storage: 4°C; Do not freeze.
pH stability: 5-10
Buffer stability: Borate, Tris, HEPES, PBS, MES, etc.
Shelf life: 6 months
Concentration: 2.0 uM

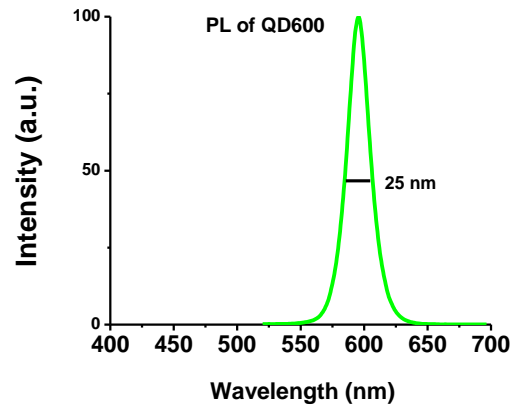
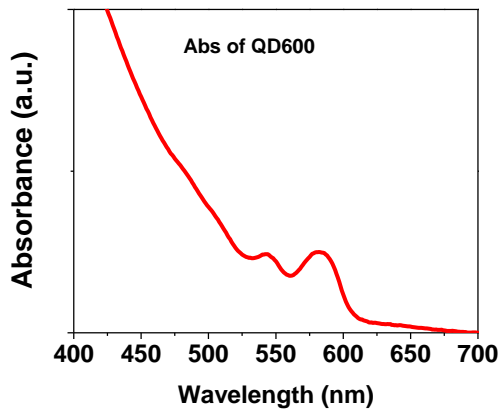
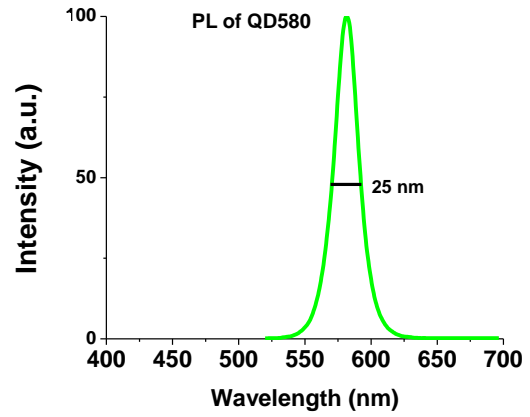
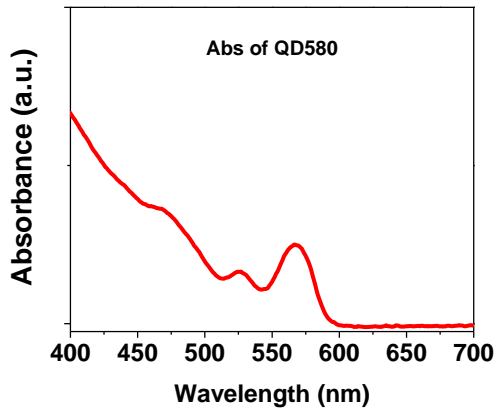
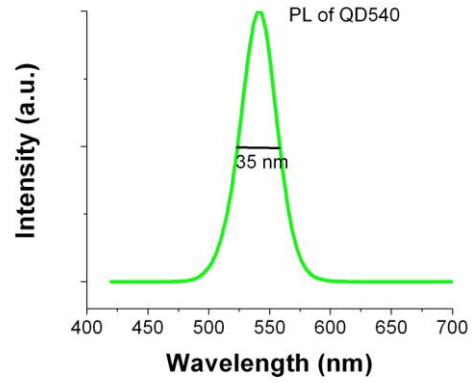
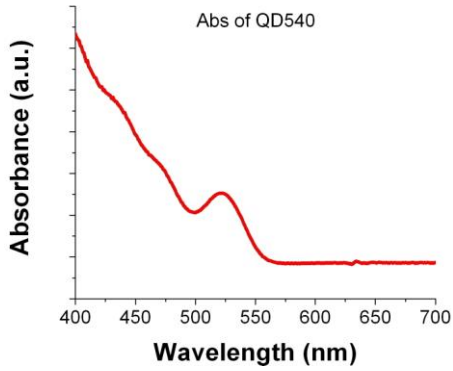
	QMG450	QMG490	QMG525	QMG540	QMG580	QMG600	QMG620	QMG645	QMG665
Emission (nm)	450	490	525	540	580	600	620	645	665
Peak Tolerance (nm)	10	10	10	10	10	10	10	10	10
FWHM (nm)*	<35	<35	<35	<35	<25	<25	<25	<35	<35
Emission Efficiency**	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%	>50%
Surface Coating	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer	Polymer

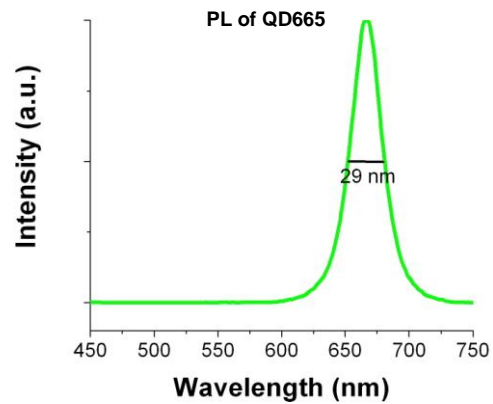
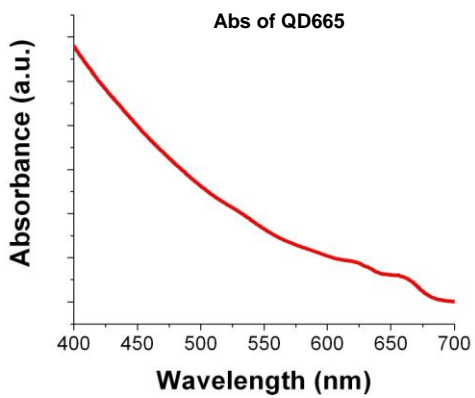
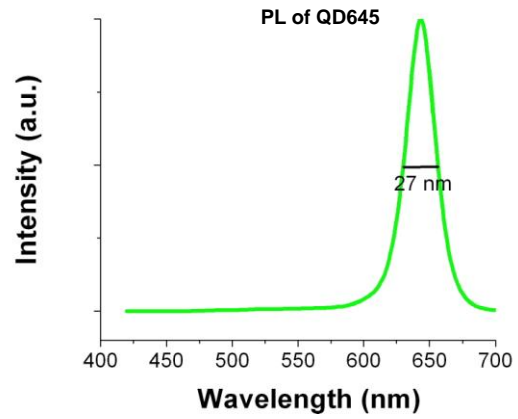
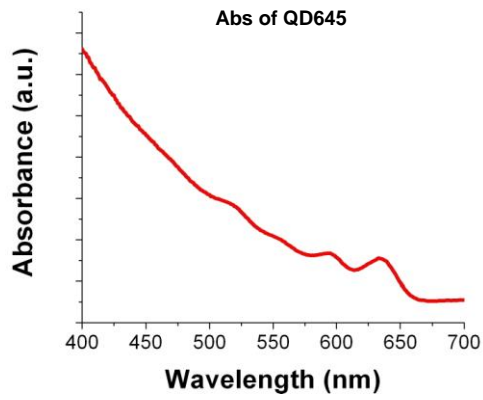
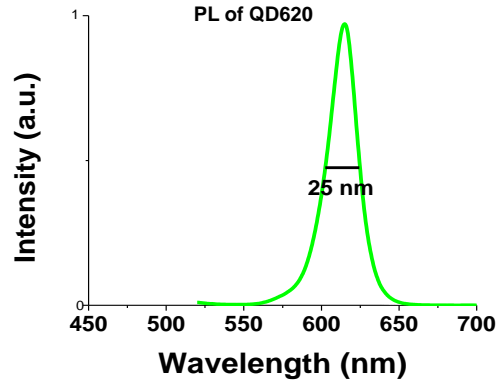
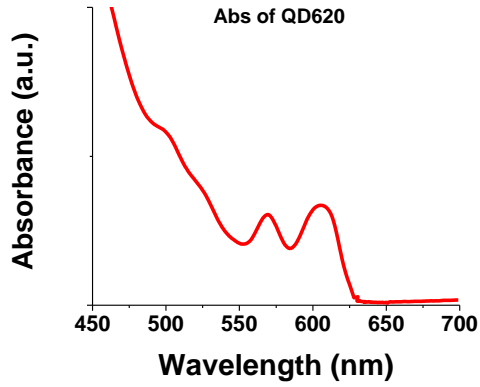
*FWMH: Full Width of Half Maximum:

**Emission efficiency was measured by integrating sphere.

Spectra:









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