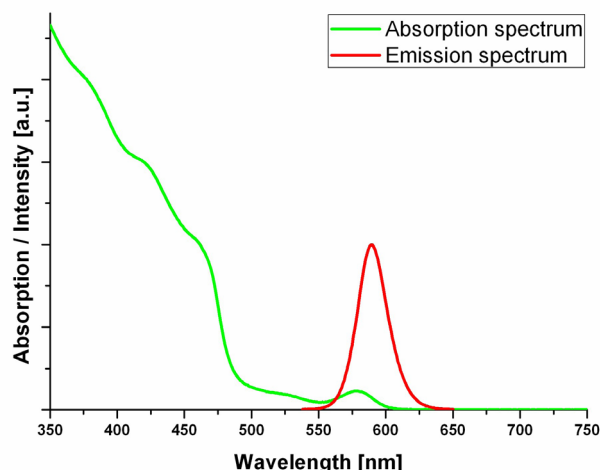


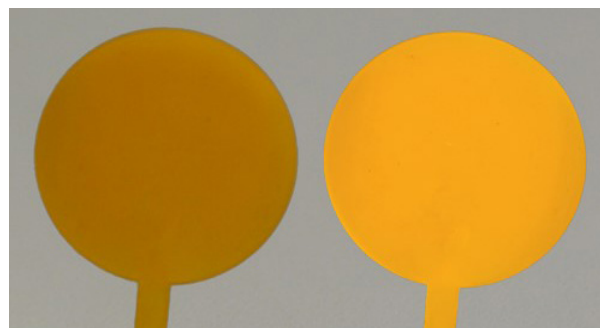
StremDots™ Series A Plus: fluorescent semiconductor nanocrystals available in three different emission colors (green, orange and red). Based on profound knowledge in nanoparticle synthesis, morphological features have been optimized to yield advanced optoelectronic properties. These are an enhanced quantum efficiency and an extremely high extinction coefficient resulting in a brightness up to ten times more than normal quantum dots.



Due to their unique shape these nanocrystals exhibit higher photo- and thermostability. Combining these advantages with superior processability, caused by efficient shielding through an outer organic shell, makes the StremDots™ Series A Plus rods highly suitable for many material and life science applications. Examples include solid state lighting (LED) and lasers as well as demanding fluorescence imaging tools. Further customization of StremDots™ Series A Plus rods can be done to provide the best solution for fluorescence applications.

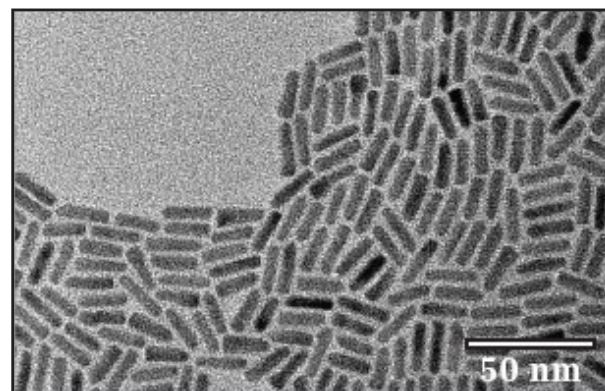


Absorption- and emission spectrum of StremDots™ Series A Plus (590 nm emission)



Polymeric compounds including StremDots™ Series A Plus showing their processability (left: without excitation, right: with excitation)

Features		Advantages	
Material	CdSe/CdS core/shell nanoparticles	Elongated Structure	High photo- and thermostability
Solubility	Nonpolar organic solvents	Efficiently Shielded Core	Quantum yield above 60%
Excitation Wavelengths	From UV to VIS possible	Higher Extinction Coefficient	Increased brightness compared to dots
Emission Maximum	560m 590 and 620 nm (2.2, 2.1 and 2.0 eV)	Stabilizing Organic Ligand Shell	Enhanced processability
FWHM	Typically <35 nm	Monodispersity of Strem Dots™	Narrow fluorescence band



TEM image of elongated core/shell particles

Size: dia. 3-5 nm x length 15-20 nm
Concentration: 5mg/mL
 Store at 2-8°C in dark under inert atmosphere
 Do not Freeze. Stable for >12 months

Catalog # 48-1053, 48-1056, 48-1059 & Kit # 96-0813

Visit www.strem.com for new product information and a searchable catalog.

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