

Effects of Inhomogeneous Shell Thickness in the Charge Transfer Dynamics of ZnTe/CdSe Nanocrystals

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Supporting Information

TEM images of 2.6 nm ZnTe cores with different thicknesses of CdSe shells are shown in figure S1, below.

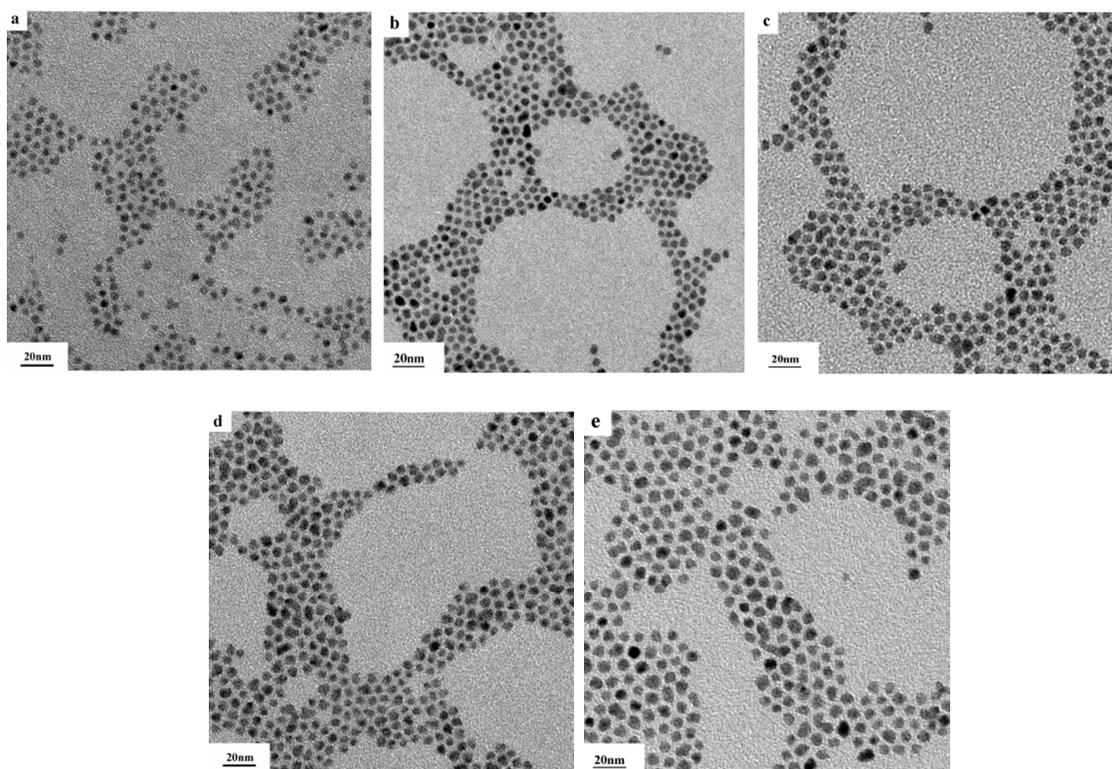


Fig S1. TEM images of ZnTe/CdSe core/shells with a CdSe shell of (a) 0.8, (b) 1.0, (c) 1.3, (d) 1.6 nm and (e) 1.95 nm on a 2.6 nm ZnTe core.

Measuring the diameter of many of these particles gives histograms of their sizes, as shown in figure S2.

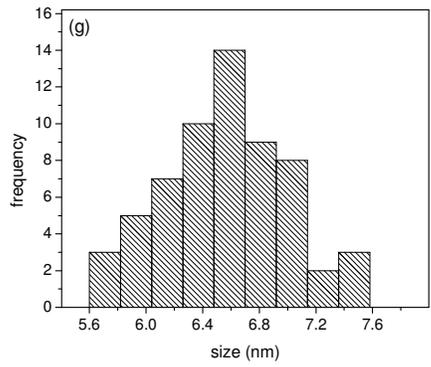
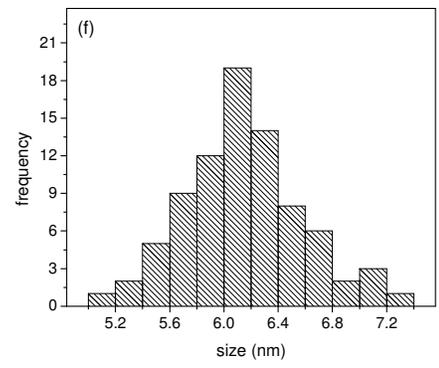
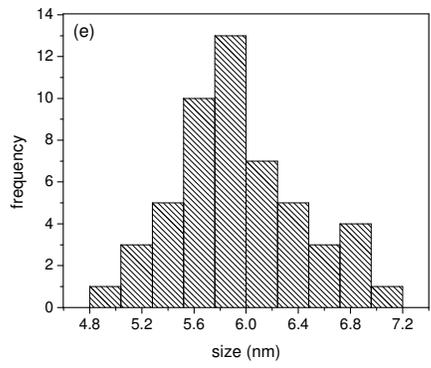
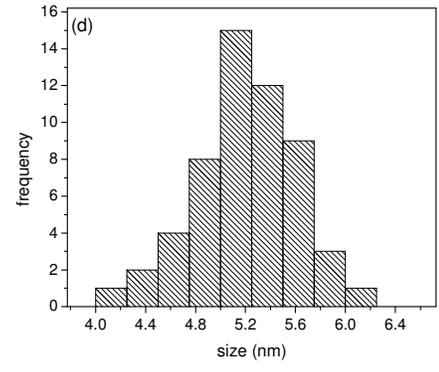
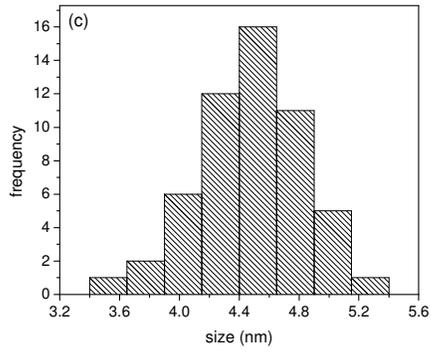
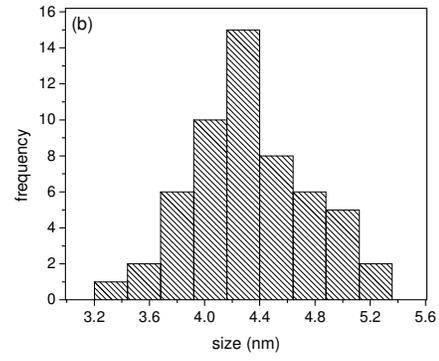
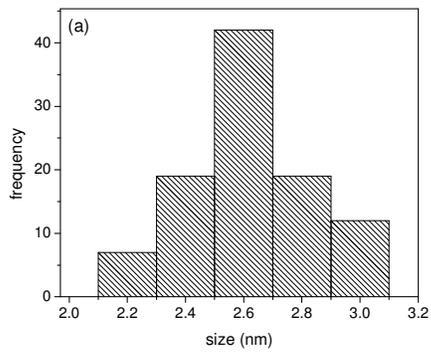


Fig S2. Size histograms of (a) ZnTe cores and ZnTe/CdSe core/shells with a CdSe shell of (b) 0.8, (c) 1.0, (d) 1.3, (e) 1.6 nm, (f) 1.8 and (g) 1.95 nm.

From the peaks of these histograms, the median particle size is determined, and knowing that the core is 2.6 nm, the shell thickness is calculated. The statistics of the particle size distributions are collected in the table below.

histogram	size	Std. dev.	number	Std. dev. of mean
a	2.68	.25	101	.025
b	4.25	.42	55	.057
c	4.64	.57	63	.072
d	5.22	.48	55	.065
e	5.92	.50	55	.067
f	6.15	.43	82	.047
g	6.48	.62	68	.075