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Addition/Correction

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# Correction to "Effects of Disorder on Electronic Properties of Nanocrystal Assemblies"

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We recently reported a study of the effects of disorder on charge-carrier transport in nanocrystal assemblies.[1] We found a mistake in the calculation of the onsite energy disorder, *s*, for lead salt nanocrystals. We calculated the bandgap energy[2] and then used 0.3 nm diameter fluctuation to calculate the onsite-energy disorder. However, the fluctuation in the electron or hole energy should be approximately half of the bandgap energy fluctuation, due to the nearly symmetric band structure. As a result, we overestimated the onsite energy fluctuation by a factor of 2. This mistake will not affect calculations for cadmium salt nanocrystals.

Figure 6 should be corrected as

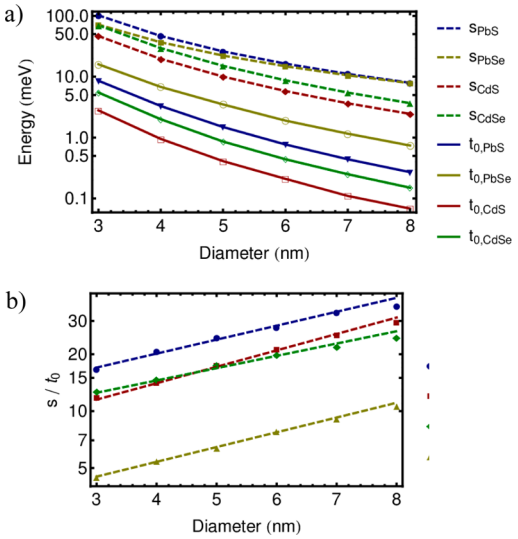


**Figure 6.** Summary of calculated coupling energy $t_0$ for EDT coupled nanocrystals and onsite energy disorder *s*. $t_0$ is calculated assuming the surface to surface distance between NCs is 0.4 nm; *s* is calculated assuming standard deviation in NC diameters is 0.3 nm for all sizes.

Similarly, Figure 7 should be corrected as

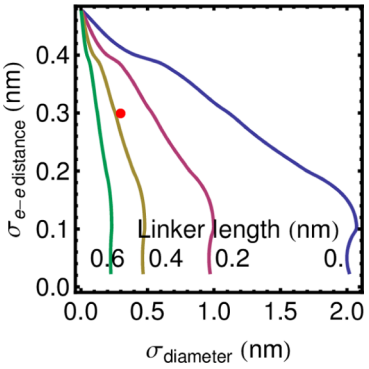


**Figure 7.** Summary of critical disorder for diameter fluctuation $\sigma_{diameter}$ and edge-to-edge distance fluctuation $\sigma_{e-e\ distance}$ for 3 nm PbSe NCs, for average edge-to-edge distances of 0, 0.2, 0.4, and 0.6 nm. The red dot that represents currently attainable sample disorder is close to the yellow line, which is the threshold for delocalized wave functions for NCs connected with EDT.

The overall conclusion of the paper changes slightly. We originally concluded that disorder in films reported to date is too large to allow delocalized states. We now conclude that films of small (3 nm diameter) lead selenide nanocrystals connected with short organic ligands (such as EDT) are close to the threshold for the existence of delocalized states.

## REFERENCES

(1) Yang, J.; Wise, F. W. Effects of Disorder on Electronic Properties of Nanocrystal Assemblies. *J. Phys. Chem. C* **2015**, *119*, 3338−3347.

(2) Kang, I.; Wise, F. W. Electronic Structure and Optical Properties of PbS and PbSe Quantum Dots. *J. Opt. Soc. Am. B* **1997**, *14*, 1632.

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