Supporting Information for
The Role of Surface States in Silver-Doped CdSe and CdSe/CdS Quantum Dots

David Morgan and David F. Kelley

Chemistry and Chemical Biology, University of California Merced,
5200 North Lake Road, Merced, CA 95343

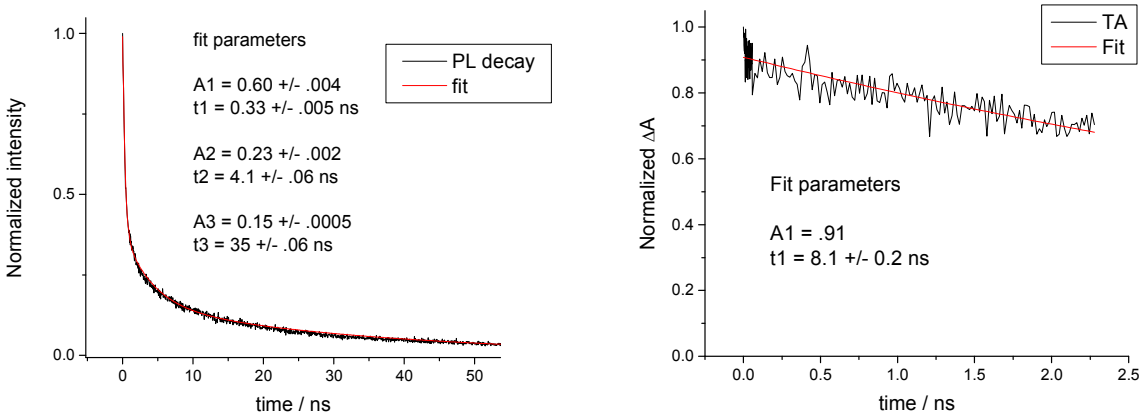
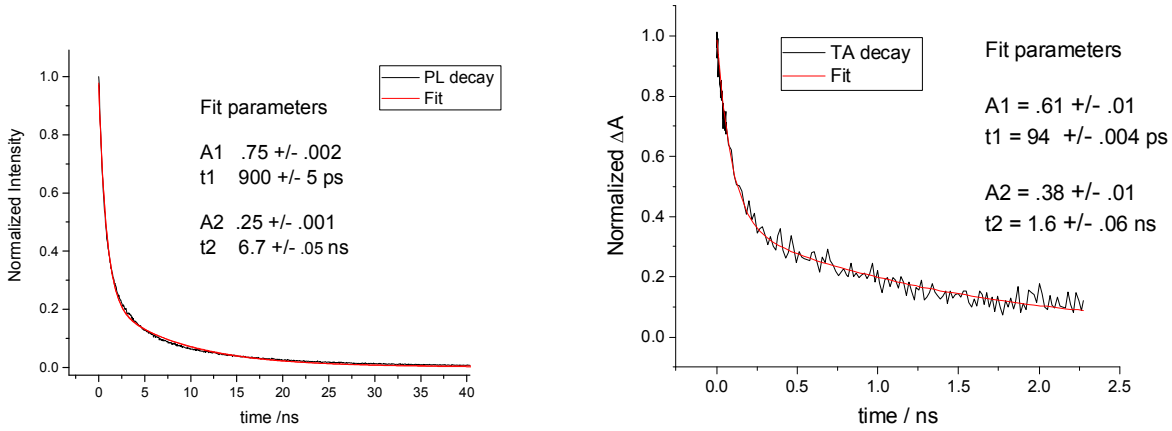


Figure S1. Fits to PL (left) and TA (right) decays of undoped, zincblende, TBP-ligated, 3.0 nm diameter CdSe particles.



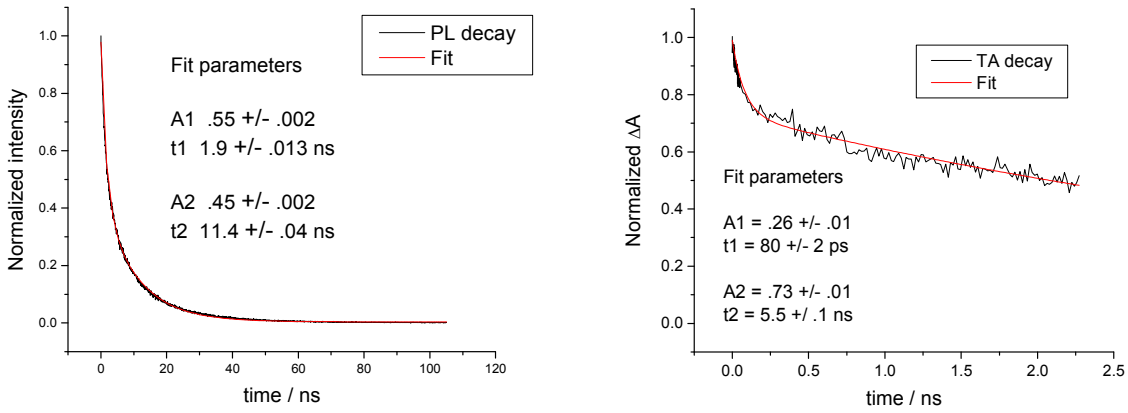


Figure S2. Fits to PL (left) and TA (right) decays for undoped (upper) and 2-ML 6 Ag/particle (lower) CdSe/CdS particles ligated with oleylamine. Fitting the long-time (0.25 – 2.0 ns) TA decay gives a time that is intermediate between the (biphasic) PL decay times.

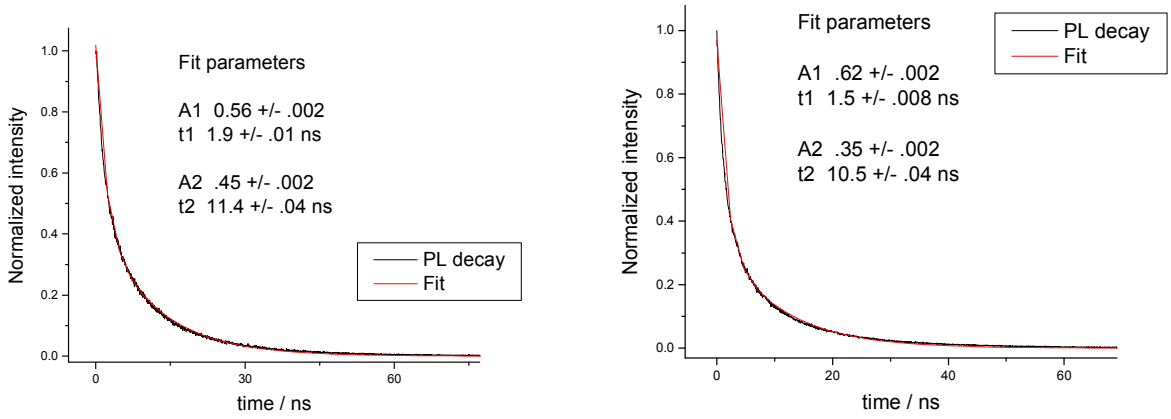


Figure S3. Fits to PL decays for 3 (left) and 10 (right) Ag/particle 2-ML CdSe/CdS particles ligated with oleylamine.

Figures S1, S2 and S3 report uncertainties as the sigma values a from a Levenberg-Marquardt curve fitting algorithm, however, based on several repeats of these experiments we estimate the errors are generally about +/- 10%.

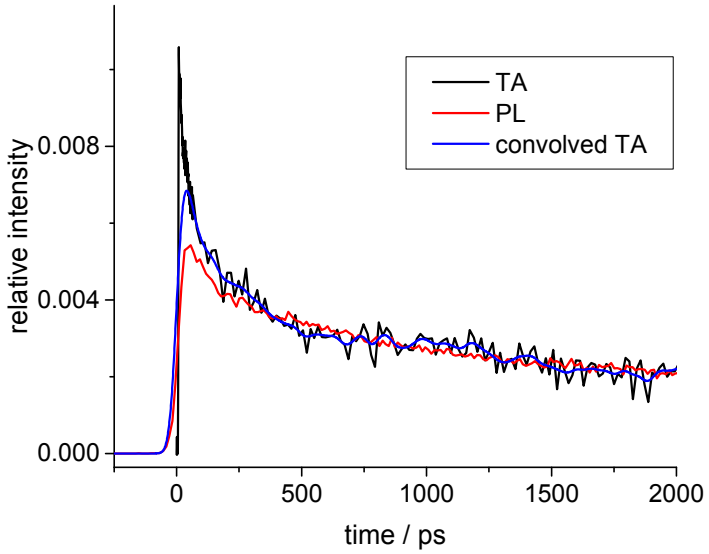


Figure S4. A comparison of the TA bleach recovery and PL decay kinetics. These PL kinetics were taken with a microchannel plate PMT detector, having about 45 ps temporal resolution. Also shown is a curve which is the TA kinetics convolved with the PL instrument response function.