Supporting information

A Size Dependent Discontinuous Decay Rate for the Exciton Emission in ZnO Quantum Dots

T. Jesper Jacobsson1*, Sviatlana Viarbitskaya2, Emad Mukhtar1 and Tomas Edvinsson1

1) Dept. of Chemistry - Ångström Laboratry, Uppsala University, Box 538, 75121 Uppsala, Sweden
2) Laboratoire Interdisciplinaire Carnot de Bourgogne CNRS-UMR 6303, Université de Bourgogne, 21078 Dijon, France

Jesper.jacobsson@kemi.uu.se, +46 (0)70-5745116

Additional fluorescence figures

In figure 3 in the main article, fluorescence data is given for one of the samples. The corresponding data for the full set of samples are given in figure S.1, S.2 and S.3. In figure 6 in the main article, the fluorescence decay is compared to the laser pulse and a single exponential decay function fitted to the data. Figures for the full sample set is given in figure S.4

Figure S.1. Contour plot of the response to the 320 nm excitation as a function of wavelength and time for all the samples. The laser pulse is seen at 320 nm and the fluorescence at longer wavelengths. This corresponds to figure 3.a in the main article.
Figure S.2. 3D surface of the fluorescence signal as a function of wavelength and time for all the samples. This corresponds to figure 3.b in the main article.

Figure S.3. Fluorescence response normalized with respect to the peak value for each wavelength as a function of time and wavelength, for all the samples. This corresponds to figure 3.c in the main article.

Figure S.4. Experimental data for the time track of the UV-decay compared to both the laser pulse and the single exponential fit. Normalized data is used. This is an extension to figure 6 in the main article.