

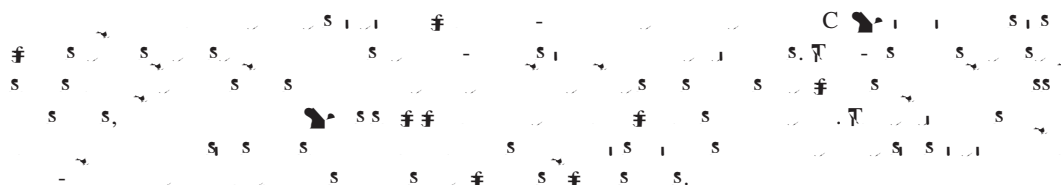
Direct observation of the structure of band-edge biexcitons in colloidal semiconductor CdSe quantum dots

L. F. A. R. C. A. P. K. 1,*

¹Department of Chemistry, McGill University, Montreal, Quebec, Canada H3A 2K6

²National Renewable Energy Laboratory, Golden, Colorado 80401, USA

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Photoluminescence (PL) spectra of CdSe quantum dots showing the structure of band-edge biexcitons. The plot shows intensity versus energy, with various peaks labeled and corresponding to different exciton states. The spectra are recorded at different excitation intensities, showing the evolution of the PL signal from single exciton states to biexciton states. The biexciton states are observed as a redshifted PL peak compared to the single exciton state. The energy levels of the single exciton and biexciton states are shown in the inset, illustrating the binding energy of the biexciton. The binding energy is found to be approximately 1.6 meV. The PL spectra are recorded at different excitation intensities, showing the evolution of the PL signal from single exciton states to biexciton states. The biexciton states are observed as a redshifted PL peak compared to the single exciton state. The energy levels of the single exciton and biexciton states are shown in the inset, illustrating the binding energy of the biexciton. The binding energy is found to be approximately 1.6 meV. The PL spectra are recorded at different excitation intensities, showing the evolution of the PL signal from single exciton states to biexciton states. The biexciton states are observed as a redshifted PL peak compared to the single exciton state. The energy levels of the single exciton and biexciton states are shown in the inset, illustrating the binding energy of the biexciton. The binding energy is found to be approximately 1.6 meV.

$\Delta OD = \frac{h_1 - h_2}{l} \cdot I_0 \cdot \epsilon \cdot c \cdot l$

(absence)

[F. 2()]

