

Photoactivation of CdSe Quantum Nanoplatelet Luminescence*

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The impact of irradiation with higher and lower quantum energy than that corresponding to the fundamental absorption band of CdSe nanoplatelets has been studied. We show that the irradiation wavelength and oxygen strongly influence the photoluminescence of nanoplatelets. We demonstrate also that irradiation of CdSe nanoplatelets dry layers leads to a reversible change in their photoluminescence quantum yield.

Keywords: semiconductor nanoplatelet, excitonic luminescence, trap states, intermittent irradiation.

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