

# **Supporting Information for “Particle-Level Engineering of Thermal Conductivity in Matrix- Embedded Semiconductor Nanocrystals”**

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In Figure S1 we show data which suggests that time-resolved photoluminescence measurements presented in the manuscript were independent of excitation pump fluence. Specifically, we show that increases or decreases of pump intensity did not produce significant changes in measured dynamic decay time constants. For each indicated pump fluence, fitted decay constants are shown.

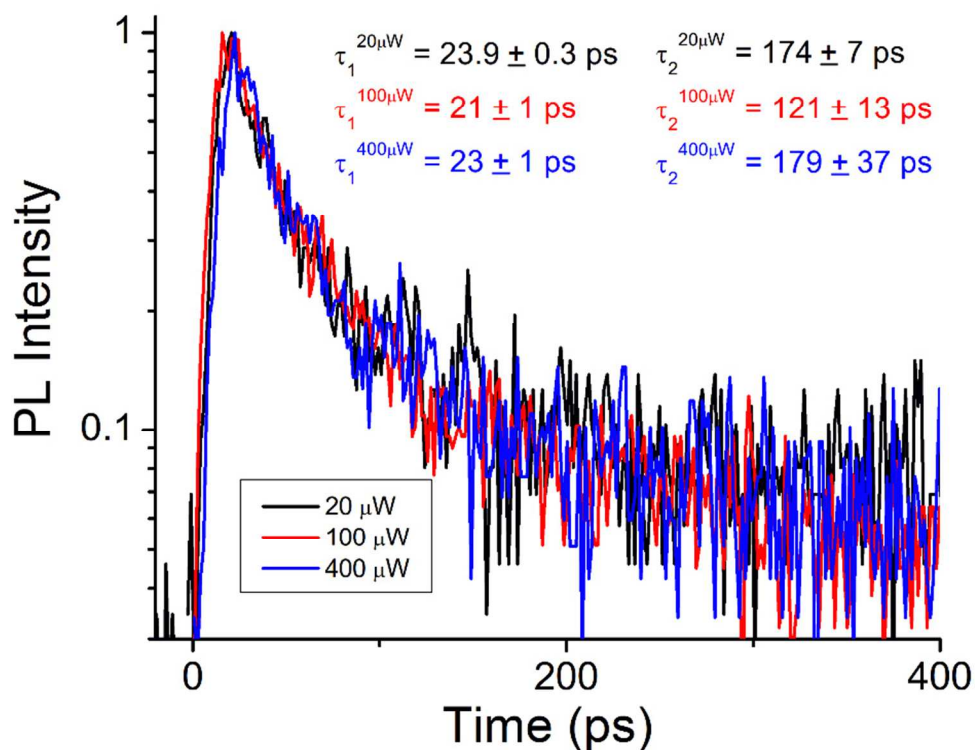


Figure S1. Time-resolved photoluminescence measured at 2.6 K for a 1.6-nm radius core-only CdSe nanocrystal sample dissolved in solid octadecane. Changes in pump fluence from 20  $\mu\text{W}$  to 400  $\mu\text{W}$  at 3 eV, using a 2 kHz repetition rate and a 450 micron diameter spot size did not produce significant changes in the decay time constants.