Size and temperature dependent carrier dynamics in oleic acid capped PbS quantum dots

*Peristera Andreakou, *† Mael Brossard,† Chunyong Li,† Maria Bernechea,‡ Gerasimos Konstantatos,‡ and Pavlos G. Lagoudakis†*

† School of Physics and Astronomy, University of Southampton, Southampton, UK

‡ ICFO - Institut de Ciències Fotòniques Castelldefels, Barcelona, Spain

Supporting Information

The PL spectra of the different sizes of PbS QDs at 6 K are illustrated in Figure 1. Also, the PL decays of the different sizes of QDs fitted with the proposed theoretical model are shown in Figure 2.

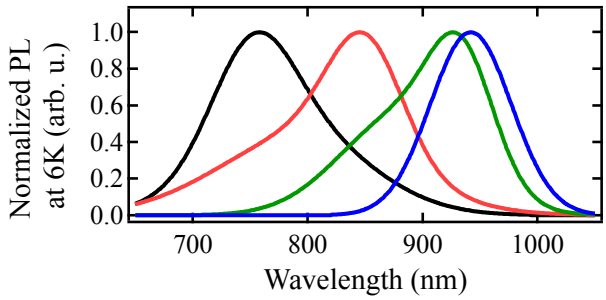

Figure 1. PL spectra of 2.3 nm (red line), 2.6 nm (blue line) PbS QDs at 6 K

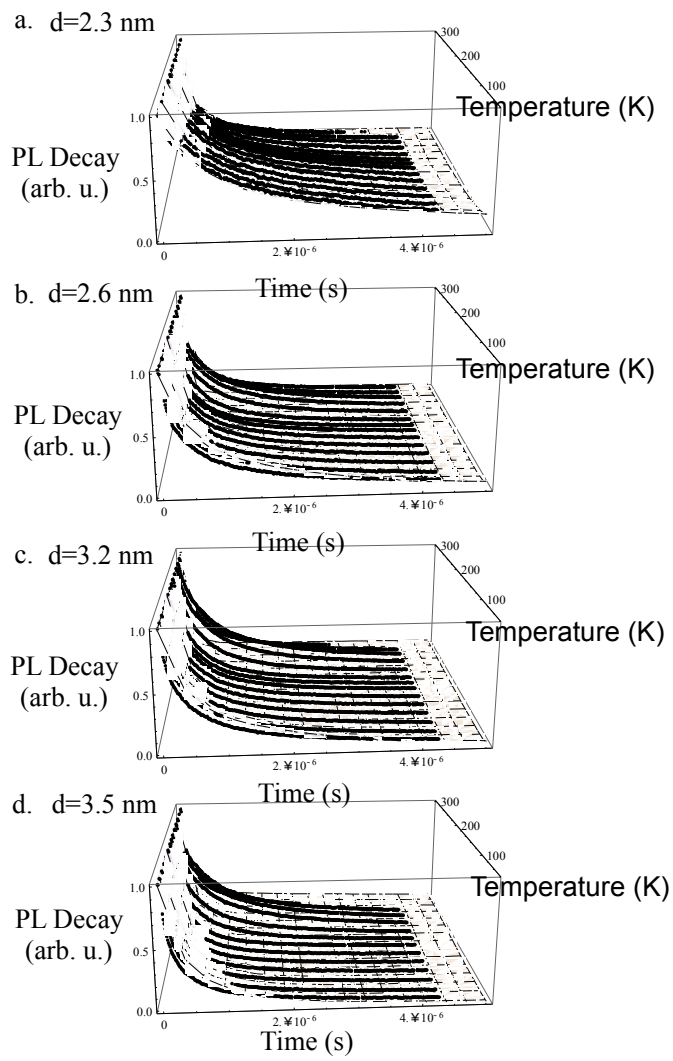

Figure 2. PL decay curves fitted with the proposed theoretical model for the 2.3 nm (a), 2.6 nm (b), 3.2 nm (c), and 3.5 nm (d) diameter PbS QDs