

Abstract Submitted
for the OSS14 Meeting of
The American Physical Society

Forster Resonance Energy Transfer in PbS Quantum Dot Films

MATTHEW LEOPOLD, Bowling Green State University, SUN RESEARCH GROUP TEAM — Forster resonance energy transfer (FRET) is a phenomenon which occurs when an excited fluorophore loses its energy to a nearby fluorophore with lower excitation energy through dipole-dipole coupling. We observed FRET between large PbS Quantum dots and small quantum dots when they were close to each other in a film. The photoluminescence intensity of the large quantum dots is enhanced by a factor of ten. This technique may help to improve the efficiency of light emission of quantum dots in thin films.

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Date submitted: 14 Mar 2014

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