Structural and Electronic Properties of $CdSe_xTe_{1-x}$ /CdTe thin-film photovoltaic devices: Carrier Dynamics Analysis by Charge Carrier Collection Efficiency

Sanghyun Lee[a] and Kent Price[b]

[a]Department of Electrical and Computer Engineering and Fujio Cho Department of Engineering Technology, Pigman College of Engineering, University of Kentucky
[b]Department of Physics, Morehead State University

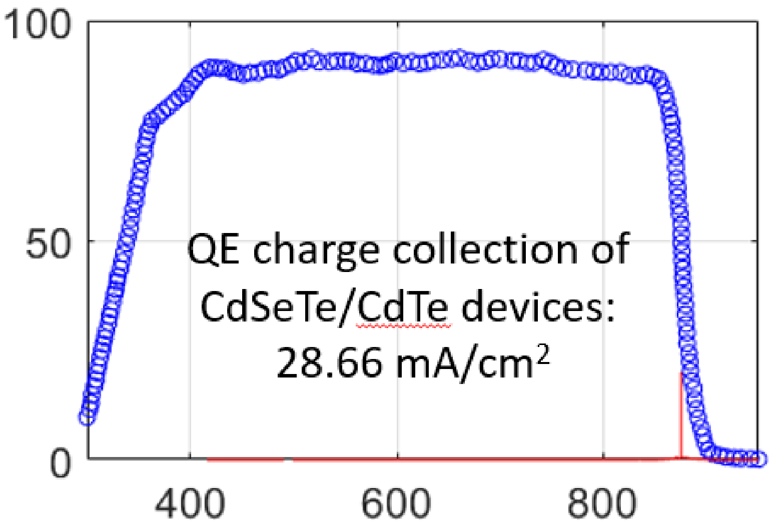

Fig. 1. Quantum charge carrier efficiency measurements. The total charge carrier collection by QE is 28.66 mA/cm^2. The blue line is data for $CdSe_xTe_{1-x}$/CdTe devices and the red line is for bandgap energy calculations. The bandgap energy is calculated as 1.41 eV.