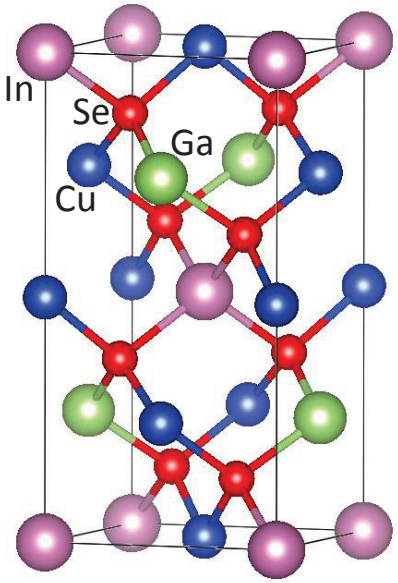
$CIS = CuInSe_2$

$CGS = CuGaSe_2$

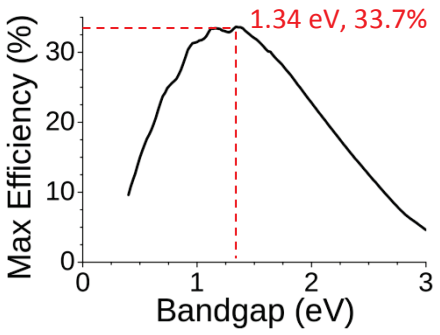
$CIGS = Cu(In, Ga)Se_2 = CuIn_{1-x}Ga_xSe_2$



Unit cell of $CuIn_{0.5}Ga_{0.5}Se_2$

Advantages of CIGS:

1. Tunable bandgap (1.0 to 1.7 eV)
2. Efficienty 23.3% in the lab
3. Higher absorption coefficient
   ➡ thinner ➡ lower cost and flexible



The Shockley-Queisser limit for the efficiency of a solar cell.

CIGS is doing well in the Building-integrated photovoltaics market.