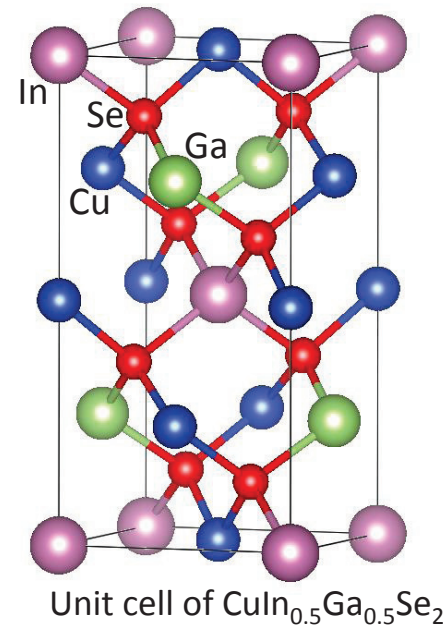


CIS = CuInSe₂

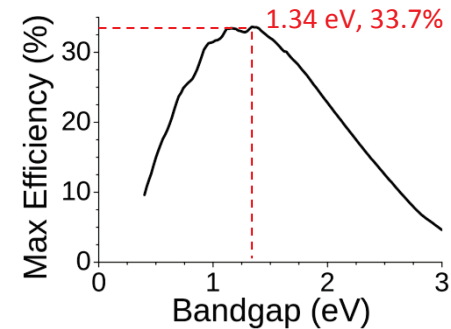
CGS = CuGaSe₂

CIGS = Cu(In, Ga)Se₂ = CuIn_{1-x}Ga_xSe₂



Advantages of CIGS:

1. Tunable band-gap (1.0 to 1.7 eV)
2. Efficiency 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.