

Primer on Semiconductors Lecture 1.6 Quick Problem

Mark Lundstrom
Purdue University, Fall 2018

Answer the questions below.

Consider Si at 300 K doped with Ga at a concentration of 10^{17} cm^{-3} . Approximately what is the concentration of holes in the valence band?

Repeat the problem, but this time assume $T = 10 \text{ K}$.