Theory and Technology of Semiconductor Devices
Assignment 2

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Due: Dec 22

Problem 1 Doing an Arsenic diffusion on a p-type wafer with background doping of $10^{17} cm^{-3}$ with limited amount of Arsenic (constant-total-dopant) of $10^{14} cm^{-2}$ at $1100°C$ for 1.5 hr, find the surface concentration and junction depth.
Note: $D = 2.07 \times 10^{-14}\ cm^2/s$ for Arsenic at $1100°C$