

svar til oppgaver:

2.1 $V_0 = 1\text{eV}$

3.7 $N_d = 2.63 \times 10^{16} / \text{cm}^3$ ej joniserade $2.1 \times 10^{14} / \text{cm}^3$

3.10 Si fungerer $n \gg n_i$ Ge fungerer inte $n \sim n_i$

3.15 2.5V $J = 8.82 \times 10^{-2} \text{ A/cm}^2$, 2500V $J = 1.6 \times 10^3 \text{ A/cm}^2$

3.20 $V_{\text{hall}} = 3\text{mV}$, $p_0 = 3.1 \times 10^{17} / \text{cm}^3$, $\rho = 0.033 \text{ ohm cm}$, $\mu_p = 600 \text{ V/Vs}$

4.9 $\Delta R = 9.14 \text{ Megohm}$

4.11 $\Delta I = A * L * q * g_{op} * \tau_n / \tau_t$

4.16 se föreläsning L4 slide 17

5.9

5.10

5.11

5.12

5.14

5.10

5.22

5.26

6.9

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6.16

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6.19