

$$d = r_{\text{CC}} \frac{\sqrt{3}}{\pi} \sqrt{n^2 + nm + m^2}$$

$$P = e^{-\frac{2L}{\hbar} \sqrt{2m(V_0 - E)}}$$

$$E_n = \frac{h^2 n^2}{8m^* L^2}$$

$$\Delta E = h\nu = \frac{hc}{\lambda}$$

$$d = \frac{MZ}{N_A V}$$

$$m_e = 9,11 \cdot 10^{-31} \text{ kg}$$

$$h = 6,63 \cdot 10^{-34} \text{ J s}$$

$$\hbar = 1,05 \cdot 10^{-34} \text{ J s}$$

$$c = 3,00 \cdot 10^8 \text{ m s}^{-1}$$

$$N_A = 6,02 \cdot 10^{23} \text{ mol}^{-1}$$

$$r_{\text{CC}} = 1,42 \cdot 10^{-10} \text{ m}$$

$$1 \text{ eV} = 1,60 \cdot 10^{-19} \text{ J}$$

Si

Ge

GaN

GaAs

ZnSe

m^*/m_e

0,20

0,041

0,13

0,067

0,21