$$=$$
 $E_a^{BD} = E_c - 0.225 \text{ eV}$

$$\sigma_n^{BD} = 2.3 \cdot 10^{-14} \text{ cm}^2$$

■
$$E_a^{V3} = E_c - 0.545 \text{ eV}$$

□ $\sigma_n^{V3} = 1.7 \cdot 10^{-15} \text{ cm}^2$
□ $\sigma p^{V3} = 9 \cdot 10^{-14} \text{ cm}^2$

■
$$E_a^{lp} = E_c - 0.545 \text{ eV}$$

□ $\sigma_n^{lp} = 1.7 \cdot 10^{-15} \text{ cm}^2$
□ $\sigma p^{lp} = 9 \cdot 10^{-14} \text{ cm}^2$

$$\rightarrow$$
 E_a^{H116K} = E_v + 0.33eV

$$> \sigma_p^{H116K} = 4.10^{-14} \text{ cm}^2$$

Point defects

Extended defects
$$\Rightarrow$$
 $E_a^{H140K} = E_v + 0.36eV$

$$\sigma_p^{H140K} = 2.5 \cdot 10^{-15} \text{ cm}^2$$

$$E_a^{H152K} = E_v + 0.42eV$$

$$\sigma_p^{H152K} = 2.3 \cdot 10^{-14} \text{ cm}^2$$

$$E_a^{E30K} = E_c - 0.1eV$$

$$\sigma_n^{E30K} = 2.3 \cdot 10^{-14} \text{ cm}^2$$

$$V_3^{-0}$$
 $I_p^{0/-}$

H152K 0/-H140K ^{0/-} H<u>116K</u> ^{0/-}

E30K ^{0/+}

Point defects

Extended defects