Origins of the doping asymmetry in oxides: Hole doping in NiO versus electron doping in ZnO

[illegible]

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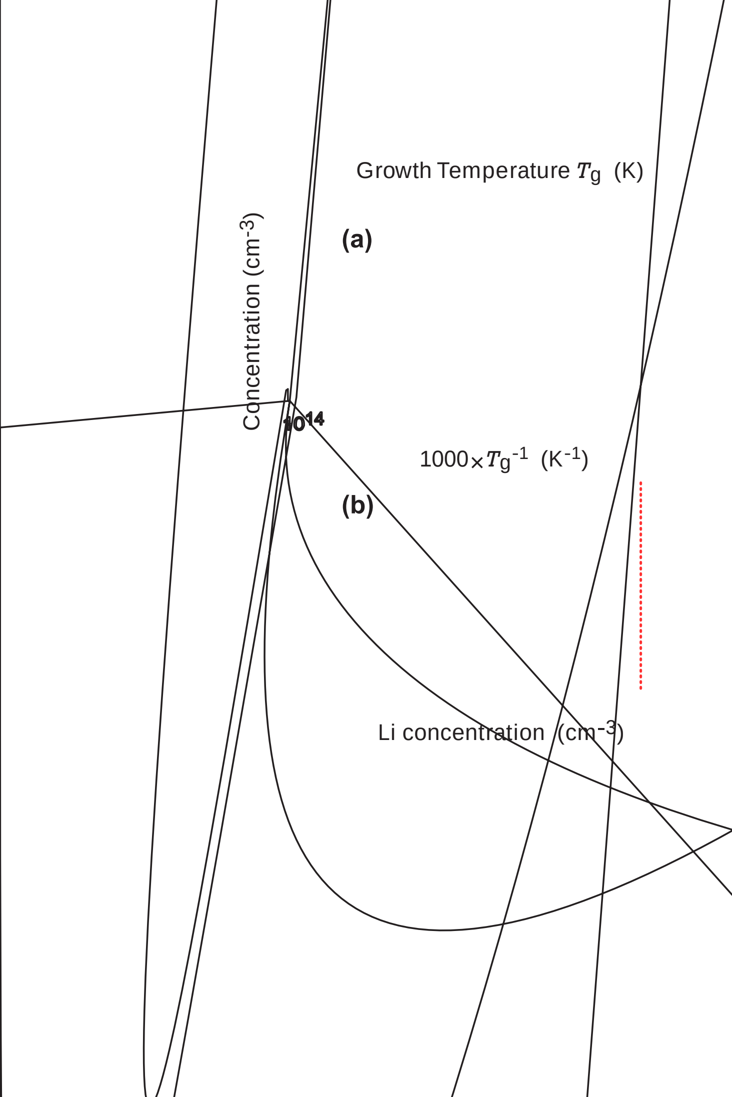

$$\Delta E(A/B) = [\epsilon_B(A/B) - \epsilon_A(A/B)] + (\varepsilon_B - \varepsilon_A), \quad ( )$$

$\epsilon_A(A/B)$ $\epsilon_B(A/B)$ A B A/B A B ε_A ε_B A B. B, A $\varepsilon_A = 0$.

E^{n} E^{p} A B

$E^{n} - E + 0$. E $E^{n} - E$. E $E^{p} - E$ 0. 0.

[illegible]