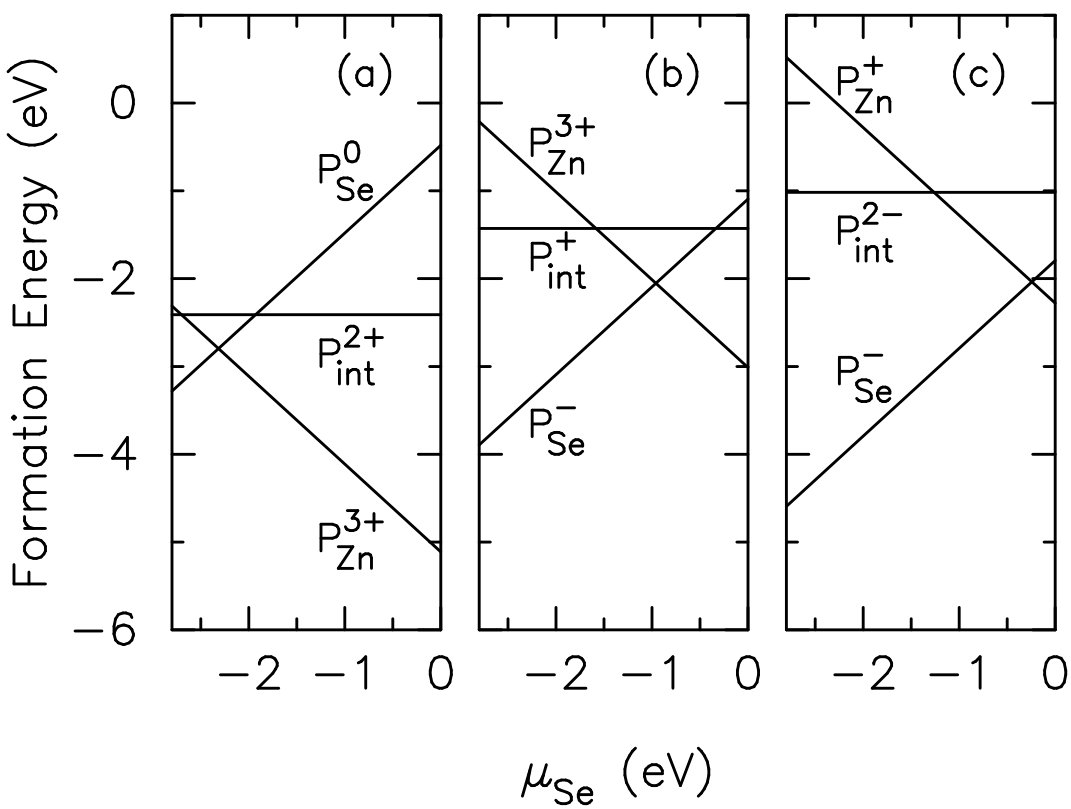
(a)
(b)
(c)
$P^0_{Se}$
$P^{2+}_{int}$
$P^{3+}_{Zn}$
$P^{3+}_{Zn}$
$P^+_{int}$
$P^-_{Se}$
$P^+_{Zn}$
$P^{2-}_{int}$
$P^-_{Se}$
Formation Energy (eV)
0
−2
−4
−6
−2
−1
0
$\mu_{Se}$ (eV)