(a) $x_{\text{Li}} = 0.25$
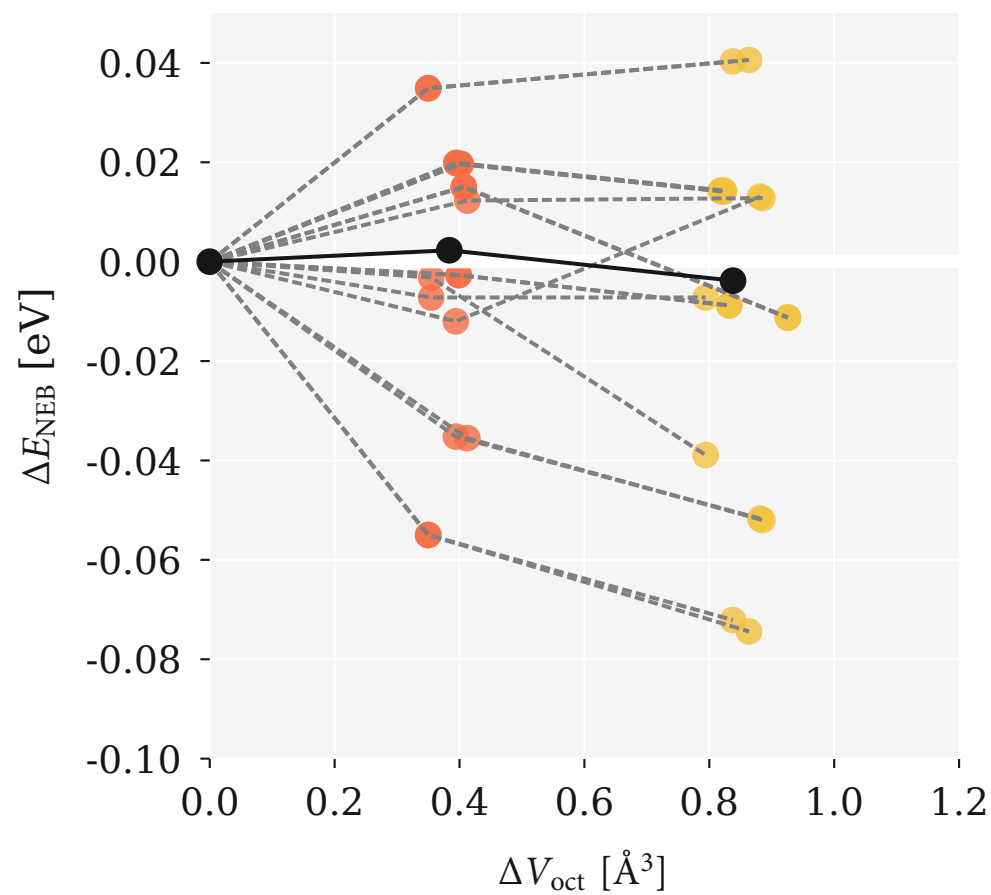
(b) $x_{\text{Li}} = 0.50$