

58. We obtain

$$\begin{aligned} Q &= (m_V - m_{\text{Ti}}) c^2 - E_K \\ &= (48.94852 \text{ u} - 48.94787 \text{ u}) (931.5 \text{ MeV/u}) - 0.00547 \text{ MeV} \\ &= 0.600 \text{ MeV} . \end{aligned}$$