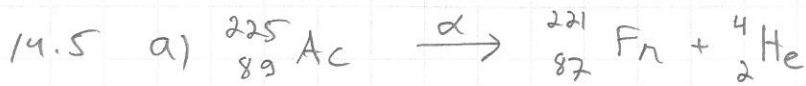


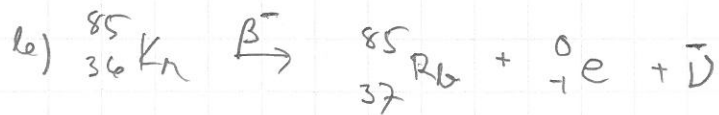
14, ydinreaktiot



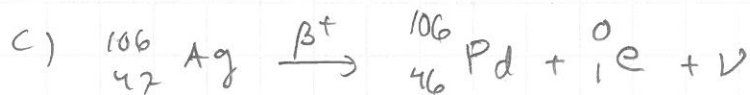
Hajoamisenergia $Q = \Delta mc^2 =$
 $= \left[\underbrace{m({}_{89}^{225}\text{Ac}) - 89m_e}_{\text{Ac-ydin}} - \left(\underbrace{m({}_{87}^{221}\text{Fr}) - 87m_e}_{\text{Fr-ydin}} \right) - \underbrace{(m({}_2^4\text{He}) - 2m_e)}_{\text{He-ydin}} \right] c^2$

$= [m({}_{89}^{225}\text{Ac}) - m({}_{87}^{221}\text{Fr}) - m({}_2^4\text{He})] c^2$

$= 0,006372 \text{ u} \cdot 931,494 \frac{\text{MeV}}{\text{u}} \approx \underline{\underline{5,94 \text{ MeV}}}$



$Q = \Delta mc^2 = [m({}_{36}^{85}\text{Kr}) - m({}_{37}^{85}\text{Rb})] c^2 = \dots \approx 0,687 \text{ MeV}$



$Q = \Delta mc^2 = [m({}_{47}^{106}\text{Ag}) - m({}_{46}^{106}\text{Pd}) - 2m_e] c^2 = \dots \approx 1,94 \text{ MeV}$