14. The following statement represents a nuclear reaction.

$$^{240}_{94}$$
Pu $\rightarrow ^{236}_{92}$ U $+ ^{4}_{2}$ He

The total mass of the particles before the reaction is  $398.626 \times 10^{-27}$  kg. The total mass of the particles after the reaction is  $398.615 \times 10^{-27}$  kg. The energy released in this reaction is:

A 
$$1.1 \times 10^{-29} \text{ J}$$

B 
$$3.3 \times 10^{-21} \text{ J}$$

C 
$$5.0 \times 10^{-13} \text{ J}$$

D 
$$9.9 \times 10^{-13} \text{ J}$$

E 
$$3.6 \times 10^{-8} \text{ J.}$$