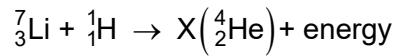


- 29** In the following induced nuclear reaction, when one Lithium-7 nucleus reacts with one Hydrogen-1 nucleus, X number of Helium-4 nuclei are produced.



During the reaction, 1.6×10^{12} J of energy is released when 1.0 g of Hydrogen-1 (mass of 1 Hydrogen-1 nucleus = 1.008 u) and sufficient Lithium-7 are used. The binding energy of a Helium-4 nucleus is 28.3 MeV.

What is the binding energy of a Lithium-7 nucleus?

- A** 11.6 MeV **B** 39.9 MeV **C** 56.6 MeV **D** 68.2 MeV