^{26}Si

^{26}Si was identified in 1960 by Robinson and Johnson in "Decay of Si^{26}" (1960Ro06). Magnesium targets were bombarded with an 8 MeV ^{3}He beam from the Purdue 37-in cyclotron. ^{26}Si was produced in the reaction ^{24}Mg(^{3}He,n) and identified by measuring decay curves and γ-ray spectra with a NaI(Tl) detector. "An internally consistent argument based on the known decay characteristics of reaction products that may be expected from energy considerations, the results of half-life studies, experimental gamma spectra, and nuclear systematics can be made to support the conclusion that the (2.1$\pm$0.3)-sec halflife is that of Si^{26} produced in the reaction Mg^{24}(He^{3},n)Si^{26}, and a consistent decay scheme can be proposed." A previously measured 1.7 s half-life assigned to ^{26}Si was not credited with the discovery because the identification was only suggested "from a simple consideration of preferred reaction type[s] and estimates of threshold[s]" (1954Ty33).

Adapted from reference (2012Th10)

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