

³⁶K

The existence of ³⁶K was shown by Berg et al. in 1967 in “³⁶K decay and T=1 analog in ³⁶Ar” ([1967Be11](#)). An enriched ³⁶Ar gas target was bombarded with 23 MeV protons from the Michigan State sector-focused cyclotron and ³⁶K was formed in the (p,n) charge exchange reaction. Decay curves and γ -ray spectra were measured with a Ge(Li) detector. “Values of the ³⁶K half-life were calculated from such data by comparing the yield in successive spectra of each γ ray identified as a transition in ³⁶Ar. The resulting value for the ³⁶K half-life after correction for the decrease in analyzer dead time in successive spectra was 0.265 sec, with a standard deviation of 0.025 sec.”

Adapted from reference ([2012Th10](#))

[1967Be11](#) R. E. Berg, J. L. Snelgrove, and E. Kashy, Phys. Rev. **153**, 1165 (1967).
[2012Th10](#) M. Thoennessen, At. Data Nucl. Data Tables **98**, 933 (2012).

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