

⁶⁷As

In the 1980 article “ β^+ Decay of ⁶⁷As” Murphy et al. reported the discovery of ⁶⁷As at Argonne National Laboratory ([1980Mu12](#)). The isotope was produced via the fusion-evaporation reaction $^{58}\text{Ni}(^{14}\text{N},\alpha n)$ where the ¹⁴N ions were accelerated by the FN tandem accelerator to energies of 39 and 41 MeV. “The half life, decay scheme, and mass excess of ⁶⁷As have been determined from β -delayed γ -ray singles and γ - γ coincidence, and β - γ coincidence measurements.” The half-life was found to be 42.5(12) s. It should be mentioned that Murphy et al. already reported the results of the experiment in a conference abstract in 1976 ([1976MuZR](#)).

Adapted from reference ([2010Sh34](#))

- [1976MuZR](#) M. J. Murphy, C. N. Davids, E. B. Norman, R. C. Pardo, and L. A. Parks, Bull. Am. Phys. Soc. 21, No. 8, 968, AD9 (1976).
- [1980Mu12](#) M. J. Murphy, C. N. Davids, and E. B. Norman, Phys. Rev. C **22**, 2204 (1980).
- [2010Sh34](#) A. Shore, A. Fritsch, M. Heim, A. Schuh, and M. Thoennessen, At. Data Nucl. Data Tables **96**, 299 (2010).

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