^{22}F

^{22}F was observed by Vaughn et al. in 1965 in "New Isotope of Fluorine: F^{22}" (1965Va06). Neutrons of 14.8 MeV from the reaction T(d,n)^{4}He produced by the Lockheed 3.5 MeV Van de Graaff accelerator at the Palo Alto Research Laboratories irradiated a ^{22}Ne gas sample. ^{22}F was formed in the (n,p) charge exchange reaction. Gamma- and β-rays of the activated samples were measured with NaI(Tl) scintillators and a plastic scintillator ΔE-E telescope, respectively. "Measurements of the half-life of F^{22} were made by observing the number of β rays emitted from F^{22} (with and without a γ-ray coincidence requirement) as a function of time. The observed half-life is 4.0$\pm$0.4 seconds."

Adapted from reference (2012Th01)

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