^{62}Co

^{62}Co was discovered by Parmley et al. as reported in the 1949 paper "The Radioactivities of Some High Mass Isotopes of Cobalt" (1949Pa01). 22 MeV deuterons from the Crocker Laboratory 60-inch cyclotron at Berkeley bombarded a beryllium target to generate a beam of neutrons. ^{62}Co was then produced in the reaction ^{62}Ni(n,p) on an enriched ^{62}Ni target. Following chemical separation, β-decay curves were measured with a Geiger counter. "Neutron bombardment of the nickel sample enriched in isotope 62 yielded activities with half-lives of 13.9±0.2 min. and 1.6±0.2 min... These facts make it apparent that the 13.9-minutes decay is associated with an (n,p) reaction in Ni^{62} yielding radioactive Co^{62}." The observed half-lives of 1.6(2) m and 13.9(2) m correspond to the ground state and an isomeric state, respectively.

Adapted from reference (2010Sz02)

1949Pa01 T. J. Parmley, B. J. Moyer, and R. C. Lilly, Phys. Rev. **75**, 619 (1949).

2010Sz02 T. Szymanski and M. Thoennessen, At. Data Nucl. Data Tables **96**, 848 (2010).

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