^{86}Y

Hyde and O'Kelley first identified ^{86}Y in their paper, "Radiochemical and Spectrometer Studies of Several Neutron-Deficient Zirconium Isotopes and Their Decay Products," in 1951 (1951Hy24). Thin strips of niobium metal were bombarded with 100 MeV protons from the Berkeley 184-inch synchrocyclotron. The spallation products were separated through rapid radiochemistry and studied with a beta-ray spectrometer. "Zr^{86} is a 17±2-hour orbital electron capturing isotope decaying into Y^{86}, which in turn disintegrates into stable Sr^{86} with a half-life of 14.6±0.2 hours by the emission of positrons." A 105-day activity had previously been incorrectly assigned to ^{86}Y (1940Du05). Subsequently this half-life (100 days) had been reported by other authors without questioning the mass assignment (1940Pe03, 1941Do01, 1941Ri01).

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1940Du05 L. A. DuBridge and J. Marshall, Phys. Rev. **58**, 7 (1940).
1940Pe03 C. Pecher, Phys. Rev. **58**, 843 (1940).
1941Do01 J. R. Downing, M. Deutsch, and A. Roberts, Phys. Rev. **60**, 470 (1941).
1941Ri01 J. R. Richardson, Phys. Rev. **60**, 188 (1941).
1951Hy24 E. K. Hyde and G. D. O'Kelley, Phys. Rev. **82**, 944 (1951).
2012Ny02 A. Nystrom and M. Thoennessen, At. Data Nucl. Data Tables **98**, 95 (2012).

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