

⁹⁷Zr

⁹⁷Zr was identified by Katcoff and Finkle in the 1951 paper “Energies of Radiations of 17h Zr⁹⁷ and 75m Nb⁹⁷” (1951KaZX). ²³⁹Pu was irradiated at the Argonne Heavy-Water Pile and β- and γ-rays were measured following chemical separation. “By subtracting the aluminum absorption curve of 75m Nb⁹⁷ from the curve for the mixture, the absorption curve for pure Zr⁹⁷ was obtained.” Katcoff and Finkle assumed the half-life of 17 h to be known, however, no previous publication assigning this half-life to ⁹⁷Zr could be found. It had been a known zirconium activity with no mass assignment (1940Gr04, 1941Ha17, 1951BrZY). Sagane et al. had incorrectly assigned it to ⁹⁵Zr (1940Sa08). They also incorrectly assigned a half-life of 6(1) m to ⁹⁷Zr. Technically, the first refereed publication was by Burgus et al. in 1950 (1950Bu54), however, as participants of the Plutonium Project, they had access and gave credit to the work of Katcoff and Finkle.

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