

⁸¹Zr

In 1997, the first observation of ⁸¹Zr was published in “Half-Lives of the T_{1/2}=1/2 Series Nuclei, ⁸¹Zr and ⁸⁵Mo” by Huang et al. (1997Hu15). At the Heavy-Ion Research Facility in Lanzhou, a 170 MeV ³²S beam bombarded an enriched ⁵⁸Ni target. γ -rays were measured with two coaxial HPGe detectors, while protons were detected with a Si(Au) surface barrier detector. “By using the least squares method to fit the time spectrum, a half-life of 5.3±0.5 s is obtained.” Earlier reports of half-lives of 7-15 min (1965Za02) and 15±5 s (1982De36) were incorrect.

Adapted from reference (2012Ny02)

- 1965Za02 N. G. Zaitseva, V. V. Kuznetsov, M. Y. Kuznetsova, Ma Ho Ik *et al.*, Soviet J. Nucl. Phys. **1**, 273 (1965).
- 1982De36 S. Della Negra, H. Gauvin, D. Jacquet, and Y. Le Beyec, Z. Phys. A **307**, 305 (1982).
- 1997Hu15 W. X. Huang, R. C. Ma, X. J. Xu, S. W. Xu *et al.*, Z. Phys. A **359**, 349 (1997).
- 2012Ny02 A. Nystrom and M. Thoennessen, At. Data Nucl. Data Tables **98**, 95 (2012).

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