^{141}I

In 1974, Kratz and Herrmann discovered ^{141}I as published in "Delayed-neutron emission from short-lived Br and I isotopes" (1974Kr21). Enriched ^{235}U was irradiated with thermal neutrons in the Mainz Triga reactor to produce ^{141}I. Neutron decay curves were measured with five ^{3}He filled proportional counters following chemical separation. "In addition to the known precursors ^{137}I, ^{138}I, ^{139}I and ^{140}I, the iodine fraction, [the figure] shows a component of 0.41 sec half-life attributed to ^{141}I." Two months later Rudstam et al. (1974Ru08) independently reported a half-life of 0.44 s quoting a compilation (1973To16) and a conference proceeding (1974RuZH). The compilation by Tomlinson quoted the half-life as 0.44(6) s based on an internal report (1970HeZH) and stated that ^{141}I had also been identified in a conference proceedings (1969ScZY). The conference proceeding by Rudstam et al. did contain data on ^{141}I.

Adapted from reference (2013Ka01)

1969ScZY H. D. Schussler, H. Ahrens, H. Folger, H. Franz *et al.*, Proc. Symp. Phys. Chem. Fission, 2nd, Vienna, Intern. At. En. Agency, Vienna, p. 591 (1969).

1970HeZH G. Herrmann, N. Kaffrell, N. Trautmann, R. Denig *et al.*, CONF-CERN **2**, p. 985 (1970).

1973To16 L. Tomlinson, At. Data Nucl. Data Tables **12**, 179 (1973).

1974Kr21 K. L. Kratz and G. Herrmann, Nucl. Phys. A **229**, 179 (1974).

1974Ru08 G. Rudstam, S. Shalev, and O. C. Jonsson, Nucl. Instrum. Methods **120**, 333 (1974).

1974RuZH G. Rudstam, IAEA-169, Rev. Paper no. 12, Vol. 2, p. 1 (1974).

2013Ka01 J. Kathawa, C. Fry, and M. Thoennessen, At. Data Nucl. Data Tables **99**, 22 (2013).

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