^{79}Se

^{79}Se was identified in the 1950 paper "Bestimmung der Massenzahl der 3,9-min-Aktivität des Selens" by Flammersfeld and Herr (1950Fl75). A BrH solution was irradiated by neutrons produced by Li+d and Be+d reactions with 1.4 MeV deuterons at Mainz, Germany. The selenium activity was measured with a Geiger Müller counter following chemical separation. "Die geschilderten Tatsachen scheinen hinreichend, die Zuordnung der 3,9-min-Aktivität zur Massenzahl 79 zu gestatten, so daß diese also als ^{79}Se* zu betrachten ist." [These facts seem sufficient to assign the 3.9 min. activity to mass 79, therefore it would correspond to ^{79}Se*.] The half-life had been observed before, however, without a unique mass assignment. It was not possible to distinguish between ^{79}Se and ^{81}Se (1950Fl62). The energy of the internal transition (95.9±0.3 keV) populating the ground state was first reported by Rutledge et al. two years later (1952Ru10). They quoted Flammersfeld and Herr with an energy of 90±10, however, this value was not listed in the paper (1950Fl75). The first observation of the ground state in a refereed journal was a measurement determining the spin (1952Ha76). The half-life of the ground state was measured for the first time by Yu et al. 45 years later (1995Yu08).

Adapted from reference (2012Gr02)

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