

^{149}Cs

In 2017, Wu et al. discovered ^{149}Cs in “94 β -Decay Half-Lives of Neutron-Rich ^{55}Cs to ^{67}Ho : Experimental Feedback and Evaluation of the r-Process Rare-Earth Peak Formation” (2017Wu04). A 345 MeV/nucleon ^{238}U beam from RIBF was used to produce fission fragments which were separated with the BigRIPS separator and the ZeroDegree spectrometer. The nuclides were identified with the TOF-B ρ - ΔE method and their β -decay half-lives were measured with the Wide range Active Silicon-Strip Stopper Array for Beta and ion detection (WAS3ABi). The extracted half-life for ^{149}Cs was 0.144(5) s as listed in the supplemental material of the paper. Originally, the discovery of ^{149}Cs was attributed (2012Ma48, 2016ThZW) to a 1987 paper by Ravn (1987Ra12), however, no quantities or evidence for the direct observation of ^{149}Cs were presented. In 1999, the half-life of ^{149}Cs was reported only in a Ph.D thesis (2000KoZH). It should be mentioned that Lica et al. (2017Li06) submitted their half-life measurement of ^{149}Cs only about seven weeks after the Wu et al. paper.

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