

^{152}Cs

The first observation of ^{152}Cs was reported by Sumikama et al. in 2026 in “Expanding the Isotopic Frontier: Seven New Neutron-Rich Rare-Earth Isotopes Observed at RIKEN RI Beam bombarded a 4 mm thick beryllium target. Factory” (2026Su01). A 345 MeV/nucleon ^{238}U beam from the RIBF accelerator complex and the fragments of interest were selected with the BigRIPS separator. They were identified by their time-of-flight, magnetic rigidity and energy loss. “Seven new isotopes, ^{152}Cs , ^{155}Ba , ^{158}La , ^{159}Ce , ^{160}Ce , ^{173}Gd , and ^{175}Tb , were identified based on particle identification, the systematics of the measured production cross sections, and a significance test using p -values.” Four events of ^{152}Cs were observed.

Originally, the discovery of ^{152}Cs was attributed (2012Ma48, 2016ThZW) to a 1987 paper by Ravn (1987Ra12), however, no quantities or evidence for the direct observation of ^{152}Cs were presented.

- [1987Ra12](#) H. L. Ravn, Nucl. Instrum. Methods Phys. Res. B **26**, 72 (1987).
[2012Ma48](#) E. May and M. Thoennessen, At. Data Nucl. Data Tables **98**, 960 (2012).
[2016ThZW](#) M. Thoennessen, The Discovery of Isotopes, A Complete Compilation, Springer, Switzerland (2016).
[2026Su01](#) T. Sumikama, N. Fukuda, T. Kubo, H. Suzuki *et al.*, J. Phys. Soc. Jap. **95**, 024202 (2026).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:[10.11578/frib/2279152](https://doi.org/10.11578/frib/2279152)”