

## <sup>56</sup>Ca

<sup>56</sup>Ca was first observed by Bernas et al. in 1997, reported in “Discovery and Cross-section Measurement of 58 New Fission Products in Projectile-fission of 750-A MeV <sup>238</sup>U” (1997Be70). Uranium ions were accelerated to 750 A·MeV by the GSI UNILAC/SIS accelerator facility and bombarded a beryllium target. The isotopes produced in the projectile-fission reaction were separated using the fragment separator FRS and the nuclear charge Z was determined by the energy loss measurement in an ionization chamber. “The mass identification was carried out by measuring the time of flight (TOF) and the magnetic rigidity  $B\rho$  with an accuracy of  $10^{-4}$ .” 11, 6 and 3 counts of <sup>54</sup>Ca, <sup>55</sup>Ca and <sup>56</sup>Ca were observed, respectively.

Adapted from reference (2011Am01)

- 1997Be70 M. Bernas, C. Engelmann, P. Armbruster, S. Czajkowski *et al.*, Phys. Lett. B **415**, 111 (1997).  
2011Am01 S. Amos, J. L. Gross, and M. Thoennessen, At. Data Nucl. Data Tables **97**, 383 (2011).

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)”