

## <sup>189</sup>Au

Smith and Hollander first observed <sup>189</sup>Au at the Berkeley Radiation Laboratory in 1955 and the results were reported in “Radiochemical Study of Neutron-Deficient Chains in the Noble Metal Region” (1955Sm42). <sup>189</sup>Au was produced in carbon induced reactions with the Berkley 60-inch cyclotron. Identification was achieved with timed chemical separation. Characteristic  $\gamma$ -ray spectra were measured with a NaI detector. “Gamma-ray spectra taken during the first few hours of its decay show, in addition to x-rays, a very prominent gamma ray at  $290\pm 10$  kev, decaying with the approximately 40-minute half-life of Au<sup>189</sup>.”

The assignment was changed (2016Th03) from the original compilation (2010Sc35) which credited a later paper by Poffe et al. (1960Po07) with the discovery of <sup>189</sup>Au.

- 1955Sm42 W. G. Smith and J. M. Hollander, Phys. Rev. **98**, 1258 (1955).  
1960Po07 N. Poffe, G. Albouy, R. Bernas, M. Gusakow *et al.*, J. Phys. Radium **21**, 343 (1960).  
2010Sc35 A. Schuh, A. Fritsch, J. Q. Ginepro, M. Heim *et al.*, At. Data Nucl. Data Tables **96**, 307 (2010).  
2016Th03 M. Thoennessen, Int. J. Mod. Phys. E **25**, 1630004 (2016).

Please cite this abstract as: “FRIB Nuclear Data Group, *Discovery of Nuclides Project*, Isotope Database, doi:10.11578/frib/2279152”