

²³⁴Cm

²³⁴Cm was discovered in 2016 by Kaji et al. as reported in the paper “Decay Properties of New Isotopes ²³⁴Bk and ²³⁰Am, and Even-Even Nuclides ²³⁴Cm and ²³⁰Pu” (2016Ka13). A 189.5 MeV ⁴⁰Ar beam accelerated by the RIKEN heavy-ion linear accelerator RILAC bombarded a gold target to form ²³⁴Bk in the reaction ¹⁹⁷Au(⁴⁰Ar,3n). Reaction products were separated with the gas-filled ion separator GARIS and transported to the rotating wheel system MANON where correlated α -particles and fission fragments were measured. “²³⁴Cm followed by the β -decay of ²³⁴Bk was also identified... We observed 7.24 ± 0.02 MeV α -line as the main peak and half-life of 49^{+15}_{-9} s.” The observation of ²³⁴Cm was not considered a discovery referring to an internal report (2002CaZZ) and a conference proceeding (2002CaZU).

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