

²⁵⁵Lr

Druin from Dubna reported the first observation of ²⁵⁵Lr in the 1971 paper “Radioactive properties of isotopes of element 103” (1970Dr08). A ²⁴³Am target was bombarded with a ¹⁶O beam and ²⁵⁵Lr was formed in the (4n) fusion-evaporation reaction. Recoil products were swept from the target with a gas stream and collected on a filter where subsequent α decay was measured with two α -particle detectors. “It was shown that the α emitter with $E_\alpha = 8.38$ MeV and $T_{1/2} \sim 20$ sec behaves like a product of total fusion of O^{16} and Am^{243} with subsequent evaporation of four neutrons, i.e., like isotope 103^{255} .”

Adapted from reference (2013Th02)

1970Dr08 V. A. Druin, Sov. J. Nucl. Phys. **12**, 146 (1971).

2013Th02 M. Thoennessen, At. Data Nucl. Data Tables **99**, 312 (2013).

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