

¹⁵⁶Lu

Macfarlane discovered ¹⁵⁶Lu in 1965 as reported in “Alpha-decay properties of some lutetium and hafnium isotopes near the 82-neutron closed shell” ([1965Ma14](#)). An enriched ¹⁴⁴Sm target was bombarded with ¹⁹F at the Berkeley heavy-ion linear accelerator and ¹⁵⁵Lu and ¹⁵⁶Lu were produced in (8n) and (7n) fusion evaporation reactions, respectively. Excitation functions and α -particles spectra were measured. “The peak of the excitation function falls at an excitation energy of 103 MeV which is in good agreement with the values previously observed for (H.I.,7n) reactions. (See the above discussion of the Lu¹⁵⁵ results.) The mass assignment of this activity must, therefore, be Lu¹⁵⁶”

Adapted from reference ([2012Gr19](#))

[1965Ma14](#) R. D. Macfarlane, Phys. Rev. **137**, B1448 (1965).

[2012Gr19](#) J. L. Gross and M. Thoennessen, At. Data Nucl. Data Tables **98**, 983 (2012).

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