

## **<sup>158</sup>Hf**

Macfarlane discovered <sup>158</sup>Hf in 1965 as reported in “Alpha-decay properties of some lutetium and hafnium isotopes near the 82-neutron closed shell” ([1965Ma14](#)). An enriched <sup>144</sup>Sm target was bombarded with <sup>20</sup>Ne at the Berkeley heavy-ion linear accelerator and <sup>158</sup>Hf was produced in (6n) fusion evaporation reactions. Excitation functions and  $\alpha$ -particles spectra were measured. “The results obtained above, therefore, are consistent with the mass assignment of Hf<sup>158</sup> to this activity.”

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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