

¹⁹⁹Ir

¹⁹⁹Ir was discovered in 1993 by Zhao et al. at the Nuclear Structure Facility of Daresbury Laboratory, as reported in their paper “Production of ¹⁹⁹Ir via exotic nucleon transfer reaction” (1993Zh31). A 140 MeV ¹⁸O beam was used to bombard enriched ¹⁹⁸Pt targets and ¹⁹⁹Ir was produced in the heavy-ion transfer reaction ¹⁹⁸Pt(¹⁸O, ¹⁷F). Reaction fragments were measured and with a high resolution QMG/2 magnetic spectrometer. “The experimental results have shown that although the yield is very low, there is good evidence for a distinct upper limit to the spectrum. Taking this point as the position of the ground state, gives a Q-value for the reaction of -8.241 ± 0.034 MeV, and a mass excess for ¹⁹⁹Ir of -24.424 ± 0.034 MeV.”

Adapted from reference (2012Ro36)

1993Zh31 K. Zhao, J. S. Lilley, P. V. Drumm, D. D. Warner *et al.*, Chin. Phys. Lett. **10**, 265 (1993).

2012Ro36 R. Robinson and M. Thoennessen, At. Data Nucl. Data Tables **98**, 911 (2012).

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