# $^{180}$Lu

The identification of $^{180}$Lu was described by Gujrathi and D'Auria from Simon Fraser University in 1971 in "The decay of $^{180}$Lu to the levels of $^{180}$Hf" (1971Gu02). Natural hafnium metal and hafnium oxide enriched in $^{180}$Hf were irradiated with 14.8 MeV neutrons from a Texas Nuclear Corp. Model 9400 neutron generator. Subsequent radiation was measured with a $\gamma$-ray spectrometer, an X-ray spectrometer and an anthracene crystal. "The remaining resolved photopeaks are found to decay with a composite half-life of 5.3$\pm$0.3 min and are assigned to the decay of a beta unstable level in $^{180}$Lu." Previously a 4.5(1) min half-life was assigned to either $^{178m}$Lu or $^{180}$Lu (1960At01) and a 2.5 min half-life (1961Ta08) was incorrect. It is interesting to note that less than three month later Swindle et al. reported the discovery of the "New isotope $^{180}$Lu" (1971Sw01) quoting the uncertain mass assignment of Aten and Funke-Klopper (1960At01), but then retracted the discovery claim (1971Sw01) stating that it had been brought their attention that Aten and Funke-Klopper had discovered $^{180}$Lu quoting the same paper (1960At01).

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