^{73}Ga

The first identification of ^{73}Ga was reported by Siegel and Glendenin in 1951 in "Zinc and gallium activities in uranium fission" (1950Si02) as part of the Manhattan Project as summarized in 1946 (1946Pl01). A sample of uranyl nitrate was irradiated for two hours in the Clinton Pile in Oak Ridge and decay and absorption curves were measured following chemical separation. "The mass number of 5h Ga can be estimated from its fission yield, since the fission yield varies rapidly with the mass over much of the fission-product range. Accordingly to the distribution curve of fission yield vs. mass number, a fission yield of 1×10^{-4} per cent for the 5h Ga indicates a mass number of 73, although a mass number of 74 is also possible."

The assignment was changed from the original compilation (2012Gr19) which credited a 1949 paper by Perlman (1949Pe09). The 2016 update of the discovery project stated: "Many fission fragments were identified within the Manhattan Project and the detailed results were only published in 1951 as part of the National Nuclear Energy Series (1951CoZZ). However, a survey of the properties of the fission fragments had already been published in two simultaneous publications in the Journal of the American Chemical Society and Reviews of Modern Physics (1946Pl01) quoting the still classified papers. Thus researchers at the time were aware of the results and credit for the discovery should be given to the initially classified work if it was included in the survey paper" (2016Th03).

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