

¹⁰¹Sn

The discovery of ¹⁰¹Sn was credited to the paper “Identification of the Doubly-Magic Nucleus ¹⁰⁰Sn in the reaction ¹¹²Sn+^{nat}Ni at 63MeV/nucleon” by Lewitowicz et al. in 1994 ([1994Le27](#)). A beam of 63 MeV/nucleon ¹¹²Sn bombarded a nickel target at GANIL and ¹⁰²Sn was separated and identified using the Alpha and LISE3 spectrometers. “It is then possible to calculate for a group of events, selected on the basis of the Z and A/Q, the masses of the individual ions from the measured TKE and TOF. The resulting mass distributions for ¹⁰⁴Sn⁺⁵⁰, ¹⁰²Sn⁺⁴⁹, ¹⁰⁰Sn⁺⁴⁸ and ¹⁰⁵Sn⁺⁵⁰, ¹⁰³Sn⁺⁴⁹, ¹⁰¹Sn⁺⁴⁸, are given in Figs. 2c and 2d respectively.” Two months earlier, Schneider et al. ([1994Sc22](#)) submitted their observation of ¹⁰¹Sn, however, they acknowledged the work by Lewitowicz et al.: “Recently, an alternative production mechanism has been tested by using intermediate-energy projectile-fragmentation of 58 A·MeV ¹¹²Sn at the LISE separator at GANIL. In this study, all the light ¹¹²Sn isotopes down to ¹⁰¹Sn could be identified” ([1994Le27](#)), referring to an article in the GANIL newsletter Nouvelles de GANIL ([1993Le30](#)). It is interesting to note that in the GANIL newsletter Lewitowicz credited an internal GSI report ([1993RoZV](#)) with the discovery of ¹⁰¹Sn. It is curious that Lewitowicz did not quote an even earlier internal GSI report of ¹⁰¹Sn ([1993RoZU](#)). Neither of these reports contained any information about ¹⁰¹Sn.

This assignment was changed ([2016Th03](#)) from the original compilation ([2011Am01](#)) which credited the paper by Schneider et al. ([1994Sc22](#)) with the discovery of ¹⁰¹Sn.

- [1993Le30](#) M. Lewitowicz, R. Anne, G. Auger, D. Bazin *et al.*, Nouvelles de GANIL **48**, 7 (1993).
- [1993RoZU](#) E. Roeckl, REPT-GSI-NACHRICHTEN **05**, p. 2 (1993).
- [1993RoZV](#) E. Roeckl, REPT-GSI-NACHRICHTEN **09**, p. 3 (1993).
- [1994Le27](#) M. Lewitowicz, R. Anne, G. Auger, D. Bazin *et al.*, Phys. Lett. B **332**, 20 (1994).
- [1994Sc22](#) R. Schneider, J. Friese, J. Reinhold, K. Zeitelhack *et al.*, Z. Phys. A **348**, 241 (1994).
- [2011Am01](#) S. Amos, J. L. Gross, and M. Thoennessen, At. Data Nucl. Data Tables **97**, 383 (2011).
- [2016Th03](#) M. Thoennessen, Int. J. Mod. Phys. E **25**, 1630004 (2016).

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