

^{83}Mo

^{83}Mo was first reported in “Observation of the $Z = N + 1$ nuclei $^{77}_{39}\text{Y}$, $^{79}_{40}\text{Zr}$, and $^{83}_{42}\text{Mo}$ ” in 1999 by Janas et al. ([1999Ja02](#)). At GANIL, France, nickel targets were bombarded with a 60 MeV/nucleon ^{92}Mo beam. ^{83}Mo was separated with the LISE3 spectrometer and the kinetic energy, energy loss, and time-of-flight were measured. “The projections of the $T_z = 0$ and $-1/2$ species onto the Z axis are presented in [the figure] and clearly show the presence of the even- Z , $Z = N + 1$ nuclei, $^{75}_{38}\text{Sr}$, $^{79}_{40}\text{Zr}$, and $^{83}_{42}\text{Mo}$ in our spectra.”

Adapted from reference ([2012Pa21](#))

[1999Ja02](#) Z. Janas, C. Chandler, B. Blank, P. H. Regan *et al.*, Phys. Rev. Lett. **82**, 295 (1999).

[2012Pa21](#) A. M. Parker and M. Thoennessen, At. Data Nucl. Data Tables **98**, 812 (2012).

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