

⁶³Mn

Bosch et al. discovered ⁶³Mn in 1985 as described in “Beta-decay half-lives of new neutron-rich chromium-to-nickel isotopes and their consequences for the astrophysical r-process” (1985Bo49). ⁷⁶Ge was accelerated to 11.4 MeV/u at GSI and bombarded a natural tungsten target. ⁶³Mn was produced in a multinucleon transfer reaction and separated with the FEBIAD-F ion source and the GSI on-line mass separator. “Beta-decay studies of the new neutron-rich isotopes ^{58,59}Cr, ⁶³Mn, ^{66,67}Co and ⁶⁹Ni, yielding distinctly shorter half-lives than the corresponding theoretical predictions, are presented.” The measured half-life was 0.25(4) s.

Adapted from reference (2012Ga06)

- 1985Bo49 U. Bosch, W. D. Schmidt-Ott, P. Tidemand-Petersson, E. Runte *et al.*, Phys. Lett. B **164**, 22 (1985).
2012Ga06 K. Garofali, R. Robinson, and M. Thoennessen, At. Data Nucl. Data Tables **98**, 356 (2012).

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