

## <sup>72</sup>Mn

<sup>72</sup>Mn was identified for the first time by Tarasov et al. in 2013 in “Production cross sections from <sup>82</sup>Se fragmentation as indications of shell effects in neutron-rich isotopes close to the drip-line” (2013Ta14). A 139 MeV/nucleon primary <sup>82</sup>Se beam from the Coupled Cyclotron Facility at the National Superconducting Cyclotron Laboratory at Michigan State University was used to produce <sup>72</sup>Mn in projectile fragmentation reactions. The produced isotopes were separated and identified with a two-stage separator consisting of the A1900 fragment separator and the S800 analysis beam line. “The observed fragments include several new isotopes that are the most neutron-rich nuclides yet observed of elements  $22 \leq Z \leq 25$  (<sup>64</sup>Ti, <sup>67</sup>V, <sup>69</sup>Cr, and <sup>72</sup>Mn).”

Adapted from reference (2014Th03)

2013Ta14 O. B. Tarasov, M. Portillo, D. J. Morrissey, A. M. Amthor *et al.*, Phys. Rev. C **87**, 054612 (2013).

2014Th03 M. Thoennessen, Int. J. Mod. Phys. E **23**, 1430002 (2014).

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