${}^{60}_{21}\mathrm{Sc}_{39}$

Adopted Levels 2009Ta05,2009Ta24

History			
Туре	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 114,1849 (2013)	31-Dec-2012

 $Q(\beta^{-})=18276 \text{ syst}; S(n)=1821 \text{ syst}; Q(\alpha)=-14400 \text{ syst}$ 2012Wa38 $\Delta Q(\beta^{-})=861 \text{ syst}, \Delta S(n)=918 \text{ syst}, \Delta Q(\alpha)=1060 \text{ syst} (2012Wa38).$

 60 Sc formed by fragmentation of 76 Ge beam at 132 MeV/nucleon at NSCL facility using A1900 fragment separator combined with S800 analysis beam line to form a two stage separator system. The transmitted fragments were analyzed event-by-event in momentum and particle identification. The nuclei of interest were stopped in eight Si diodes which provided measurement of energy loss, nuclear charge and total kinetic energy. The time-of-flight of each particle that reached the detector stack was measured in four different ways using plastic scintillators, Si detectors, and parallel-plate avalanche counters. The simultaneous measurement of ΔE signals, the magnetic rigidity, total kinetic energy and the time-of-flight (tof) provided unambiguous identification of the atomic number, charge state and mass number.

⁶⁰Sc Levels

Comments

E(level)

0

Measured production cross section.

E(level): activity observed by 2009Ta05 is assumed to correspond to the ground state of 60 Sc.