Ni(^{58}Ni,X) 2011As08

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Yang Dong, Huo Junde	NDS 121, 1 (2014)	20-Jun-2014

2011As08: E=74.5 MeV/nucleon, fragments selected by magnetic-rigidity, energy-loss, and velocity analysis using the LISE3 separator at GANIL. Fragments identified individually by two silicon detectors by means of an energy-loss and time-of-flight analysis. Decays were detected in a time-projection chamber (TPC), where signals from four gas electron multipliers (GEM) detected in a two-dimensional strip detector combined with drift-time analysis could be used to reconstruct the tracks of the particles in three dimensions. Measured energy loss, E(particle), decay event counts, angular correlation between two protons. Deduced $T_{1/2}$, branching ratio, Q(2p).

2005Bl15: E=74.5/nucleon, measured fragment yield, first observation of ^{54}Zn, mass excess=−6.58 MeV *4* for ^{54}Zn. See also 2005Gi15.

All data are from 2011As08.

^{54}Zn Levels

E(level)	J^π	$T_{1/2}$	Comments
0.0	0^+	1.59 ms *+60−35*	%2p=92 *+6−13* (2011As08) %2p: other: 87 $^{10-17}$ (2005Bl15). $T_{1/2}$: Determined as 1.59 ms $^{60-35}$ (2011As08) by time difference between implantation and decay events. Other: 3.2 ms *+18−8* (2005Bl15). Q(2p)=1280 *210* (2011As08). other: 1480 keV *20* (2005Bl15).