^{60}Ni(^{40}Ca,p3n) 2003Ba39

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	D. Abriola(a), A. A. Sonzogni	NDS 109, 2501 (2008)	1-Apr-2008

2003Ba39: ^{60}Ni(^{40}Ca,P3N) 4.8 MeV/nucleon. GSI large array of Ge, silicon and total absorption spectrometer, measured Eγ, Iγ, E(p), $\beta\gamma$-coin, $\gamma\gamma$, pγ-coin, $T_{1/2}$.

1982Ku15, 1996He25 and 1997Sc30 report $T_{1/2}$ and/or %εp values assuming a single decaying level in ^{96}Ag. Because 2003Ba39 has shown that there are actually 2 levels with similar $T_{1/2}$ values, the results from these previous studies were not used in the evaluation process; they are nevertheless given below: 1982Ku15: $T_{1/2}$=5.1 s *4*, %εp=8.0 *23*. 1996He25: %εp=3.7 *9*. 1997Sc22: $T_{1/2}$=5.22 *15* from βp(t) and 4.50 s *6* from γ(t), %εp=11.9 *26*.

^{96}Ag Levels

E(level)	J^π	$T_{1/2}$ †	Comments
0.0+x	$(8)^+$	4.40 s *6*	%ε+%β^+=100; %εp=8.5 *15* (2003Ba39) E(level): from calculations(1997Sc30) which predict g.s. is 8^+. J^π: log *ft*≈5.3 to 8^+, no significant Iε to 6^+ nor to 10^+.
0.0+y	(2^+)	6.9 s *6*	%ε+%β^+=100; %εp=18 *5* (2003Ba39) J^π: log *ft*≈5.9 to 2^+, no significant Iε to 0^+ nor to 4^+.

† From γ(t) 2003Ba39.