^{86}As β^-n decay (0.945 s) 2013AgZY,1993Ru01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh and Jun Chen	NDS 116, 1 (2014)	31-Dec-2013

Parent: ^{86}As: E=0.0; $T_{1/2}$=0.945 s *8*; Q(β^-n)=5380 *4*; %β^-n decay=35.5 *6*

^{86}As-Q(β^-n): From 2012Wa38.

^{86}As-$T_{1/2}$: Measured by 1993Ru01. Others: 861 ms *64* (2013Ma22), 0.9 s *2* (1973Kr06), ≈0.9 s (1978Cr03).

^{86}As-%β^-n decay: %β^-n=35.5 *6* (2013AgZY). Others: %β^-n=33 *4* (1993Ru01), 3.8 *+17−10* (1973Kr06, revised to 15 *11* in 1993Ru01 evaluation), 10.5 *22* (1978Cr03, revised to 12 *8* in 1993Ru01 evaluation).

^{86}As with $T_{1/2}$≈0.9 s identified (1966To02, 1967De01, 1968To18, 1968To19, 1969WaZS) by observing the decay of its descendents, ^{86}Se and ^{86}Br, and by counting of delayed neutrons after separation of arsenic sample from other fission products of ^{235}U.

1993Ru01: measured %β^-n value and $T_{1/2}$ of ^{86}As from neutron and β intensities at Studsvik facility.

2013AgZY: measured %β^-n value from neutron and β intensities at JYFL facility using BELEN neutron counter Si detectors for β. This value most likely includes β^-2n contribution, although, it is predicted to be negligible in theoretical calculations (1997Mo25).

$T_{1/2}$ and %β^-n measurements: 1973Kr06 (also 1974KrZG,1975Kr08), 1978Cr03, 1993Ru01.

Evaluation and analysis: 1993Ru01, 1982Ru01, 1975Iz03.

Additional information 1.

^{85}Se Levels

E(level)	J^π	$T_{1/2}$	Comments
0	$(5/2)^+$	32.9 s *3*	J^π,$T_{1/2}$: from Adopted Levels.