Adopted Levels

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	M. S. Basunia[#], A. Chakraborty[##]	NDS 171, 1 (2021)	1-Jun-2020

$Q(\beta^-)=22.10\times10^3$ *44*; $S(n)=3.12\times10^3$ *47*; $S(p)=24.18\times10^3$ *48*; $Q(\alpha)=-25.47\times10^3$ *67* 2017Wa10
$Q(\beta^-n)=19.37\times10^3$ *42* (2017Wa10); $Q(\beta^-2n)=12.5\times10^3$ and $Q(\beta^-3n)=8.7\times10^3$ – deduced by evaluators using mass data in 2017Wa10.
$S(2n)=4.7\times10^3$ *4*, $S(2p)=55.2\times10^3$ *10 sys* (2017Wa10).
Particle stability established in tantalum + ^{40}Ar reactions (1985La03,1986Po13). Produced by ^{181}Ta(^{40}Ar,X) E=95 MeV/nucleon (1998Yo06).
Precise mass measurement: 2012Ga45, 2007Ju03.

^{23}N Levels

Cross Reference (XREF) Flags

A ^{2}H(^{24}O,p)

E(level)	$T_{1/2}$	XREF	Comments
0.0	14.1 ms *+12–13*	A	$\%\beta^-=100$; $\%\beta^-n=42$ *6*; $\%\beta^-2n=8$ *4*; $\%\beta^-3n<3.4$ (2003Yo02) $<r^2>^{1/2}(^{23}N)=3.41$ fm *23* (matter radius) (2001Oz03). J^π: $1/2^-$ from shell model calculations (2017Jo06). 2015Zh05 assumes ^{21}N core and two valence neutrons, where $J^\pi(^{21}N)$ assigned as $(1/2^-)$ in 2015Fi05. $T_{1/2}$: From β-n(t) coin 2003Yo02. Other: 14.5 ms *14* (1998Yo06 – same research group of 2003Yo02). Neutron Emission Probability $\%P_n \approx 58$ *10* (From Fig. 5b – $\%Pn=\Sigma$ i × %Pin (2003Yo02)). Other: 80 *21* (1998Yo06 – same research group of 2003Yo02).
≈3600		A	
≈5000		A	