Adopted Levels

History

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

S(n)=17712 *SY*; S(p)=1785 *SY*; Q(α)=−10556 *SY* 2017Wa10

ΔS(n)=711 (syst), ΔS(p)=503 (syst), ΔQα=505 (syst) (2017Wa10). Q(εp)=16810 *500 syst* (2017Wa10); Q(ε2p)=1.13×10^4 – deduced by evaluators using mass data in 2017Wa10.

S(2p)=1790 *500 syst* (2017Wa10).

Particle stability established in nickel + ^{40}Ca reactions (1986La17).

^{23}Si Levels

Cross Reference (XREF) Flags

A ^{9}Be(^{24}Si,^{23}Si)

E(level)	J$^\pi$	T$_{1/2}$	XREF	Comments
0.0	(5/2)$^+$	42.3 ms *4*	A	%ε+%β^+=100; %εp≈88; %ε2p=3.6 *4* %εp,%ε2p: From 1997Bl04. %εp from ≈92% (εp+ε2p) − 3.6. Other values: %εp=73 *6* and %ε2p=1.5 *11* (2018Wa05) − obtained by evaluators from data in Table 1. Peaks 10 and 11 were identified by 2018Wa05 as β2p branch. Note that the sum 75 *6*, from listed %εp and %ε2p in Table 1 (2018Wa05) is in good agreement with the sum 75 *3*, in Fig. 5 and Table 1 (1997Bl04). However, 1997Bl04 recommend ~92% (εp+ε2p) considering peaks in Fig. 1 and peaks not listed in their Table 1. 1997Bl04 mention their recommended value of ~92% is in agreement with the predicted value of 94% (Ref. 27 (private communication)). 2018Wa05 did not comment on total %(εp+ε2p) branch. The evaluators recommend the value of 1997Bl04. J$^\pi$: L=2 in (^{24}Si,^{23}Si). 5/2$^+$ from shell model (1990Br26). T$_{1/2}$: From 1997Cz02,1997Bl04. Other value: 40.17 ms *186* (2018Wa05). 1997Bl04 also present measured values from decay-time characteristics for different event groups as 46.8 ms *20*, 40.9 ms *10*, and 37.4 ms *99*. The adopted half-life of 42.3 ms *4* by 1997Bl04 was measured considering all events. Note that the value 40.7 ms *4* (1997Bl04) in the abstract and on page 250 is a misprint, confirmed by first author B. Blank (private communication with B. Singh, dated Nov. 29, 2018).