Adopted Levels

		History	
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Jean Blachot	NDS 110,1239 (2009)	1-Feb-2008

S(n)=1.055×10^4 *14*; S(p)=1.22×10^3 *10*; Q(α)=3.72×10^3 *5*   2012Wa38

Note: Current evaluation has used the following Q record 10564.0 SY1365.0 SY3.72E+3 *5*   2003Au03.

ΔS(n)=330, ΔS(p)=432 (2003Au03).

Source: ^{58}Ni(^{58}Ni,3p2n) E=290 MeV, on-line ms.

Identification: genetics with delayed α's via ^{107}Te decay.

Measured Eα(^{107}Te)=3480 with T$_{1/2}$=0.74 s *20*.

Measured Eα(^{107}Te)=3582 *10* (1991He21) no T$_{1/2}$ given.

Measured Eα(^{107}Te)=3580 with T$_{1/2}$=0.89 s *20* estimated. Syst of Q(α) and reduced α-widths are discussed (1978Ro19).

Av β-strength function calc and regional trend studied (1977Ki11).

^{111}Xe Levels

E(level)	T$_{1/2}$	Comments
0.0	0.74 s *20*	%α=8 +8−5; %ε+%β^+=?
		T$_{1/2}$: from 3480α(t)(1981Sc17). Other: 0.89 s *20* from 3580α(t) (1981Sc17). Overlapping half-lives for the two α groups do not allow interpretation as α decay of two isomeric states in ^{111}Xe, or α decay of one ^{111}Xe state to two levels in ^{107}Te. No isomer are known in odd Xe with α<121.
		%α: from 1994Pa11. From Gross β decay theory of 1973Ta30, T$_{1/2}$(ε+β^+)≈0.2 s to 1 s, so one expects roughly comparable α and β^+ decay modes.