Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan and A. A. Sonzogni	NDS 115, 135 (2014)	1-Nov-2013

Q(β^-)=−7282 *SY*; S(n)=1.206×10^4 *15*; S(p)=2.09×10^3 *15*; Q(α)=−3086 *SY* 2012Wa38
ΔQ(β^-)=333; ΔQ(α)=335 (2012Wa38).
S(2n)=26527 syst *333*; S(2p)=7.13×10^3 *15*; Q(εp)=4.90×10^3 *15* (2012Wa38).
It is unknown which level w, x, y or z corresponds to the ground state. Additionally, w or z may be the same level as x or y.

^{88}Tc Levels

Cross Reference (XREF) Flags

A ^{9}Be(^{107}Ag,Xγ)
B ^{58}Ni(^{32}S,pn)
C ^{58}Ni(^{36}Ar,αpnγ)

E(level)	J$^\pi$	T$_{1/2}$[†]	XREF	Comments
x	(5$^+$,6$^+$,7$^+$)	6.4 s *8*	B	%ε+%β^+=100; %εp=? J$^\pi$: from log *ft*≈4.8 to 6$^+$ and assuming that the spin difference between the 2 isomers should be at least 3.
y	(2$^+$,3$^+$)	5.8 s *2*	B	%ε+%β^+=100; %εp=? J$^\pi$: from log *ft*≈5.3 to 2$^+$ in ^{88}Mo. Positive parity expected as both proton and neutron originate from g9/2 orbitals.
z			C	
w			A	
z+20.9? *3*			C	
w+95		146 ns *12*	A	%IT=100 T$_{1/2}$: from γ(t) in 2009Ga40.
z+311.6[‡] *1*	J		C	
z+677.0[‡] *2*	J+1		C	
z+1193.9[‡] *3*	J+2		C	
z+1538.1[‡] *4*	J+3		C	
z+2292.7[‡] *5*	J+4		C	
z+2567.0[‡] *5*	J+5		C	
z+3660.1[‡] *7*	J+7		C	
z+4912.9[‡] *9*	J+9		C	

[†] From γ(t) measured in 1996Od01, except where noted.
[‡] Band(A): quasi-rotational band.

γ(^{88}Tc)

E$_i$(level)	J$_i^\pi$	E$_\gamma$	I$_\gamma$	E$_f$	J$_f^\pi$
w+95		95	100	w	
z+311.6	J	290.7[†] *3*		z+20.9?	
		311.6 *1*		z	
z+677.0	J+1	365.4 *2*		z+311.6	J
z+1193.9	J+2	882.3 *3*		z+311.6	J

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

$\gamma(^{88}Tc)$ (continued)

E_i(level)	J_i^π	E_γ	E_f	J_f^π	E_i(level)	J_i^π	E_γ	E_f	J_f^π
z+1538.1	J+3	344.1 *2*	z+1193.9	J+2	z+2567.0	J+5	1028.9 *4*	z+1538.1	J+3
		861.1 *3*	z+677.0	J+1	z+3660.1	J+7	1093.1 *4*	z+2567.0	J+5
z+2292.7	J+4	1098.8 *5*	z+1193.9	J+2	z+4912.9	J+9	1252.8 *6*	z+3660.1	J+7
z+2567.0	J+5	273.8 *2*	z+2292.7	J+4					

† Placement of transition in the level scheme is uncertain.

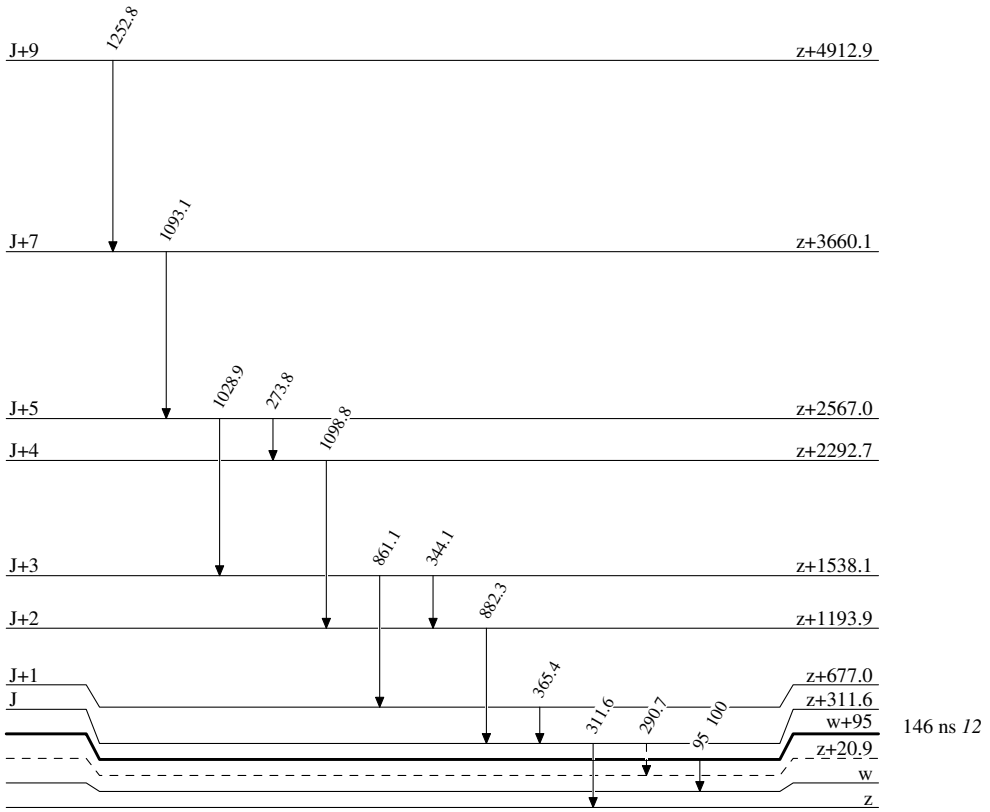
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Type not specified

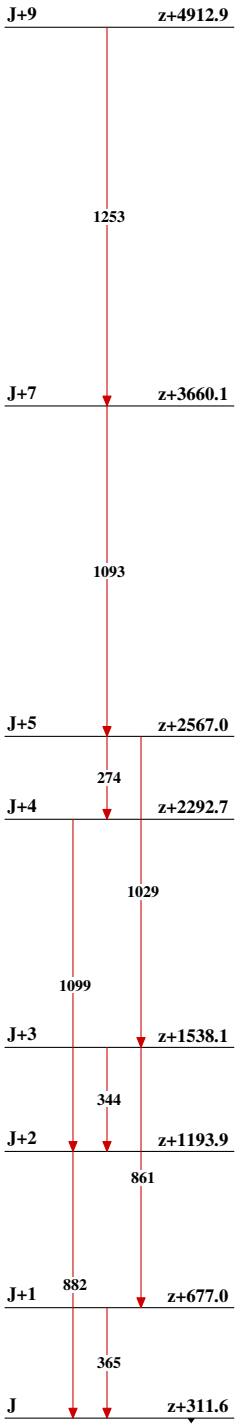
– – – – – – ► γ Decay (Uncertain)



$^{88}_{43}Tc_{45}$

Adopted Levels, Gammas

Band(A): Quasi-rotational band



$^{88}_{43}Tc_{45}$