Adopted Levels, Gammas

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Yang Dong, Huo Junde	NDS 121, 1 (2014)	20-Jun-2014

Q(β^-)=4.30×10^3 *13*; S(n)=6.84×10^3 *16*; S(p)=1.478×10^4 *30*; Q(α)=−8.43×10^3 *12* 2012Wa38
Additional information 1.
All data are from ^{238}U(^{48}Ca,Xγ), except As noted.

^{54}Ti Levels

Cross Reference (XREF) Flags

A ^{54}Sc β^- decay
B ^{238}U(^{48}Ca,Xγ)
C Coulomb excitation

E(level)	J$^\pi$	T$_{1/2}$	XREF	Comments
0.0[†]	0$^+$	2.1 s *10*	ABC	%β^-=100 T$_{1/2}$: From 2.1 s *10* (2010Cr02). Other: 1.5 s *4* (1996Do23). Additional information 2.
1494.8[†] *8*	(2$^+$)[‡#]	1.06 ps *19*	ABC	B(E2)↑=0.0357 *63* (2005Di05) T$_{1/2}$: from B(E2) In Coulomb excitation.
2496.0[†] *10*	(4$^+$)[‡#]		AB	
2515.8 *13*	(2$^+$)[#]		A	
2936.0[†] *18*	(6$^+$)		B	
3000.4 *4*			A	
3338.7 *6*			A	
3461.5 *5*			A	
5111.1 *19*	(7$^+$)[@]		B	
5459.1 *19*	(8$^+$)[@]		B	
5903.1 *20*	(8$^+$)[@]		B	
6187.1 *20*	(9$^+$)[@]		B	
6432.1 *23*	(10$^+$)[@]		B	

[†] Band(A): Yrast band.
[‡] Member of yrast band.
[#] log *ft* <6 from (3)$^+$.
[@] From ^{238}U(^{48}Ca,Xγ) and verification with shell model calculations.

γ(^{54}Ti)

E$_i$(level)	J$_i^\pi$	E$_\gamma$	I$_\gamma$	E$_f$	J$_f^\pi$	Mult.	Comments
1494.8	(2$^+$)	1495.0[†] *3*	100[†]	0.0	0$^+$	[E2]	B(E2)(W.u.)=5.9 *11*
2496.0	(4$^+$)	1002.0[†] *5*	100[†]	1494.8	(2$^+$)	[E2]	
2515.8	(2$^+$)	1020.8[†] *4*	100[†] *22*	1494.8	(2$^+$)		
		2517.5[†] *3*	56[†] *11*	0.0	0$^+$	[E2]	
2936.0	(6$^+$)	439		2496.0	(4$^+$)	[E2]	

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

$\gamma(^{54}Ti)$ (continued)

E_i(level)	J_i^π	E_γ	I_γ	E_f	J_f^π
3000.4		484.6† *4*	100† *25*	2515.8	(2^+)
		1504.0† *3*	50† *25*	1494.8	(2^+)
3338.7		840.5† *4*	100†	2496.0	(4^+)
3461.5		1965.7† *4*	100†	1494.8	(2^+)
5111.1	(7^+)	2175		2936.0	(6^+)
5459.1	(8^+)	348		5111.1	(7^+)
5459.1	(8^+)	2523		2936.0	(6^+)
5903.1	(8^+)	2967		2936.0	(6^+)
6187.1	(9^+)	284		5903.1	(8^+)
		728		5459.1	(8^+)
6432.1	(10^+)	245		6187.1	(9^+)

† From ^{54}Sc β^- decay.

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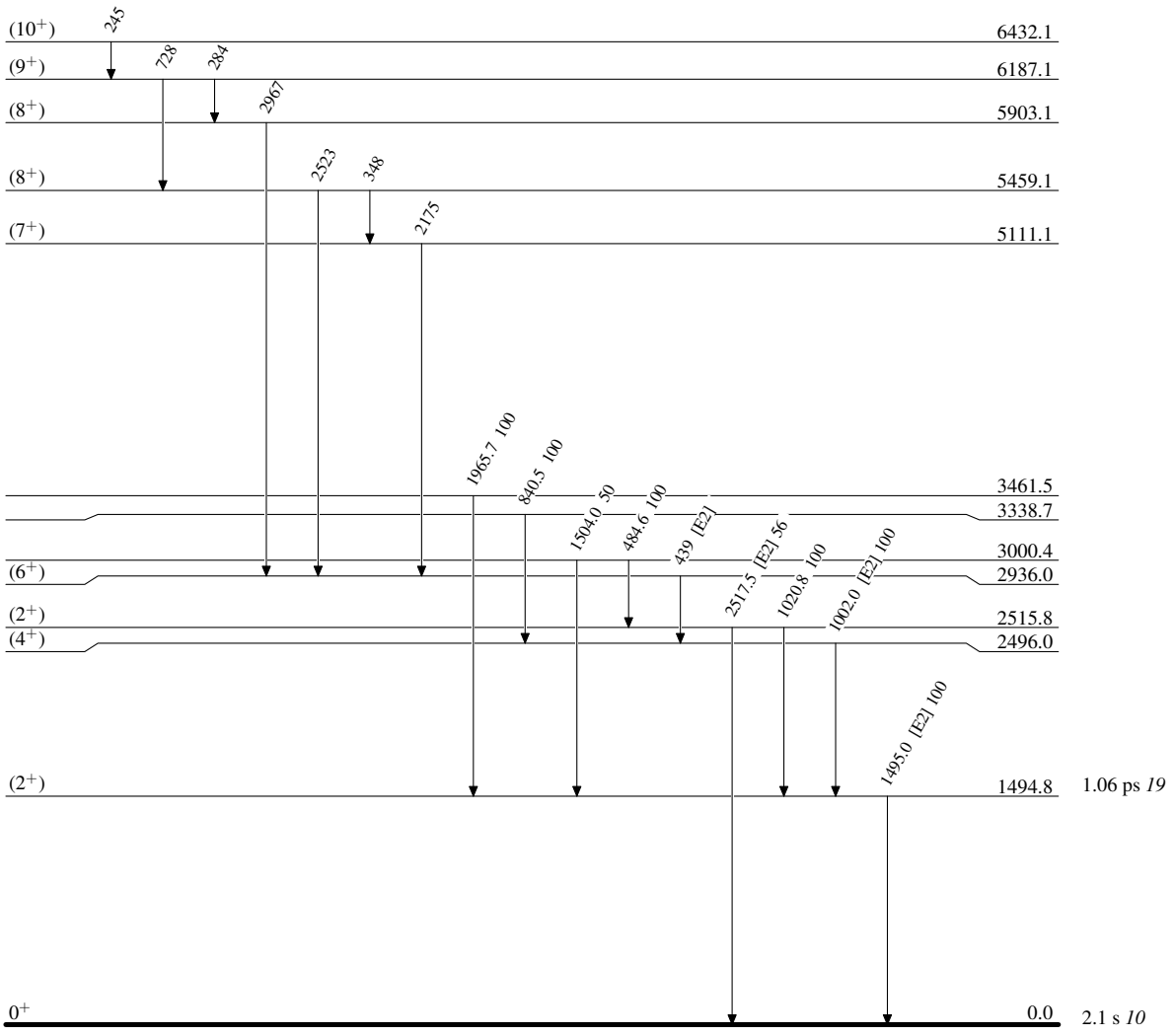
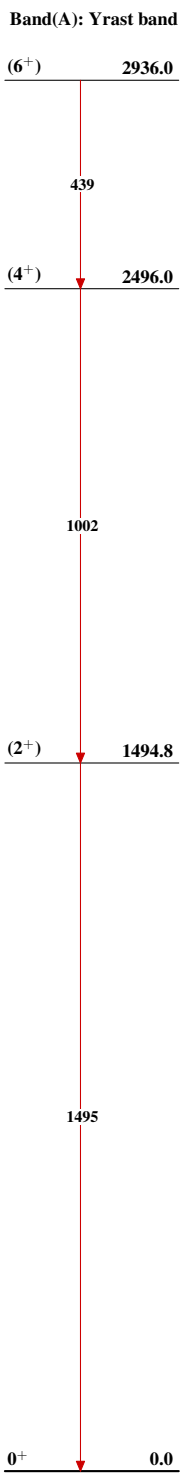
Level Scheme

Intensities: Relative photon branching from each level



$^{54}_{22}Ti_{32}$

Adopted Levels, Gammas



$^{54}_{22}Ti_{32}$