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^-)=−1377.2 *10*; S(n)=9719.12 *12*; S(p)=12373 *3*; Q(α)=−7927.9 *6* 2012Wa38
Additional information 1.

^{54}Cr Levels

Cross Reference (XREF) Flags

A	^{54}V β^- decay	K	^{54}Cr(n,n′γ)	U	^{57}Fe(n,$\alpha\gamma$)
B	^{54}Mn ε decay	L	^{54}Cr(p,p′),(p,p′γ)	V	^{53}Cr(n,γ) E=res
C	^{48}Ca(^{9}Be,3nγ)	M	^{52}Cr(α,^{2}He)	W	^{54}Cr(pol d,d′), (pol d,d′γ)
D	^{50}Ti(^{6}Li,d)	N	^{55}Mn(n,d)	X	^{12}C(^{48}Ca,α2nγ)
E	^{50}Ti(^{16}O,^{12}C)	O	Coulomb excitation	Y	^{56}Fe(μ^-,νpnγ)
F	^{51}V(α,p),(α,pγ)	P	^{55}Mn(μ^-,nγ)	Z	^{238}U(^{64}Ni,Xγ)
G	^{52}Cr(t,p)	Q	^{54}Cr(α,α')	Others:	
H	^{53}Cr(n,γ),(pol n,γ) E=th	R	^{55}Mn(p,2p)	AA	Cu(K$^-$,x rayγ)
I	^{53}Cr(d,p)	S	^{55}Mn(d,^{3}He)		
J	^{54}Cr(n,n′)	T	Fe(μ^-,xnypγ)		

E(level)[†]	J$^\pi$[&]	T$_{1/2}$[a]	XREF	Comments
0.0[f]	0$^+$	stable	ABCDEFGHIJKLMNOPQRSTUVWXYZ	XREF: Others: AA
834.855[f] *3*	2$^+$	8.0 ps *3*	ABCDEFGHIJKL NOP STUVWXYZ	XREF: Others: AA Q=−0.21 *8* (1975To06); μ=+1.68 *11* (2001Wa36) B(E2)↑=0.087 *4* (2001Ra27) XREF: G(838)N(900). μ,Q: Compiled by 2011StZZ. T$_{1/2}$: from Coulomb excitation. Other:>4.2 ps ((α,p),(α,pγ)).
1823.93[f] *7*	4$^+$	1.9 ps *6*	A CDEFGHIJ L NOP S UV X Z	XREF: N(1800). T$_{1/2}$: from DSAM in (^{9}Be,3nγ). Other: 2.4 ps *+12−8* (α,p),(α,pγ).
2619.68 *4*	2$^+$	78[c] fs *15*	A FGHI L S VW	XREF: I(2627)L(2615). T$_{1/2}$: other: 0.11 ps *+3−2* (α,p),(α,pγ).
2829.62 *5*	0$^+$	0.15 ps *+6−4*	EFGHI KL V	XREF: E(2900)I(2835)K(2776).
3074.07 *6*	2$^+$	7.1[c] fs *4*	A D FGHI L N S V	XREF: D(3080)N(3000). T$_{1/2}$: other:<0.017 ps (α,p),(α,pγ).
3159.57 *10*	4$^+$	0.24 ps *+5−4*	A DEFGHI L S V	XREF: I(3167).
3222.45[f] *13*	6$^+$	0.49[b] ps *14*	A C FG L S X Z	J$^\pi$: from L(t,p)=(6), γ(θ) in (^{9}Be,3nγ), 1398γ E2 to 4$^+$. T$_{1/2}$: other: 0.40 ps *+8−7* (α,p),(α,pγ).
3393.41 *7*	(1$^-$,2$^-$)	15[c] fs *+14−7*	FGHI L V	XREF: I(3389). T$_{1/2}$: other:<19 fs (α,p),(α,pγ). J$^\pi$: (E1) γ from (1$^-$); γ to 0$^+$.
3436.88 *6*	2$^+$	8[c] fs *3*	A EFGHI L S V	XREF: I(3442)S(3429). T$_{1/2}$: other:<10 fs (α,p),(α,pγ).
3468?			F	E(level): from (α,p) see 1979SmZQ.
3514[‡] *7*			F L	
3655.23 *20*	4$^+$	<6 fs	A EFGHI L S V	XREF: E(3630)I(3662).
3720.03 *5*	1$^+$,2$^+$	16.6[c] fs *14*	FgHI l V	XREF: g(3710)I(3726). J$^\pi$: from (pol n,γ) and γγ(θ) in (n,γ), L(d,p)=1. T$_{1/2}$: other:<30 fs (α,p),(α,pγ).
3785.71 *12*	(4)$^+$	>2.8 ps	A F L S V	J$^\pi$: fed in β^- decay by a log *ft*=5.69 branch from

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Adopted Levels, Gammas (continued)

^{54}Cr Levels (continued)

E(level)[†]	Jπ[&]	$T_{1/2}$[a]	XREF	Comments
				$J^\pi=3^+$ and 594γ to 6^+.
				$T_{1/2}$: from ^{51}V(α,p),(α,pγ).
3798.54 *12*	4^+	51 fs +*9*−*8*	A FG I L V	XREF: I(3805).
3861.02 *5*	2^+		FGHi l V	XREF: G(3862).
3870.4 *5*		>28 fs	F i l	$T_{1/2}$: from ^{51}V(α,p),(α,pγ).
3925.55 *7*	2^+		GH S V	J^π: from (n,γ) E=res and $\gamma\gamma(\theta)$.
3927.69 *8*	2^+		FGHI L V	XREF: F(3934)I(3937).
3987.42 *21*		>42 fs	F Mn	XREF: M(3980)n(4000).
				$T_{1/2}$: from ^{51}V(α,p),(α,pγ).
4012.90 *7*	0^+	1.4[c] fs +*21*−*14*	GHI L n V	XREF: I(4020)n(4000).
4043.3[h] *3*	5^+	28 fs +*13*−*10*	C eF L S X	XREF: e(4060).
				J^π: 820γ to 6^+, cascade of the yrast levels; 2221γ to 4^+.
				$T_{1/2}$: other: $T_{1/2}$<0.12 ps from (^{9}Be,3nγ).
4083.25 *6*	$(2,3,4)^+$		A e GHI L V	XREF: e(4060)I(4092).
				J^π: fed in β^- decay by a log *ft*=4.81 from 3^+.
4126.0 *7*	2[e]		V	
4127.05 *7*	3^-		GHI L S V	XREF: I(4134).
				J^π: from L(t,p)=3 and (pol n,γ). But L(d,p)=3 from 1964Le03 and log *ft*=5.69 from JPi=3^+ give π=+.
4190.8 *5*	2^+		E G I L V	XREF: E(4200)L(4195).
				J^π: From L(t,p)=2.
4217.51 *5*	$(2)^+,3^+$[e]		A HI L V	XREF: I(4225).
4239.1 *5*	2^+		G i L S V	XREF: G(4248)i(4250)L(4241).
				J^π: from L(t,p)=2+3 for E=4248 *11*.
4256.4 *4*	2^+		gHi L V	XREF: g(4248)i(4250)L(4257).
				J^π: from L(t,p)=2+3 for E=4248 *11*.
4380.95 *11*	(2^-)		GHI L V	XREF: L(4377).
				E(level): unresolved doublet in (t,p) based on fit to $\sigma(\theta)$.
				J^π: from L(t,p)=(1+3), but L(d,p)=1, π=+.
4451.0 *5*	4^+		A G L V	XREF: L(4454).
4458.4 *5*	$1^+,(2^+)$[e]		V	
4570.8 *9*	$(2^-),3^-$[e]		E L S V	XREF: E(4550)L(4572)S(4551).
4583[#] *5*	0^+		G L	J^π: From L(t,p)=0.
4618 *17*			I L S	E(level): from weighted average of 4619 *7* (p,p′),(p,p′γ) and 4617 *10* (d,p).
4633.60 *14*	2^+		GHI L V	XREF: L(4632).
				J^π: from L(t,p)=2, but L(d,p)=2, π=−.
4681.5[f] *3*	$(8)^+$	0.55[b] ps *7*	C X Z	J^π: from E2 γ to 6^+.
4689.1 *6*			X	
4740[@]			E	
4844.7 *9*	2^-[e]		I L V	
4865 *5*	$(1^-,4^+)$		G L S	E(level): from weighted average of 4864 *7* (p,p′),(p,p′γ) and 4866 *5* (t,p). Unresolved doublet in (t,p) based on fit to $\sigma(\theta)$.
				J^π: from L(t,p)=(1+4).
4872.36 *6*	2^+[d]		HI L V	
4921[‡] *7*			LM	XREF: M(4900).
4936 *7*			I L S	XREF: I(4940)L(4934).
				E(level): from weighted average of 4934 *7* (p,p′),(p,p′γ) and 4940 *10* (d,p).
4997[‡] *7*			L	

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Adopted Levels, Gammas (continued)

^{54}Cr Levels (continued)

E(level)[†]	Jπ[&]	$T_{1/2}$[a]	XREF	Comments
5017[‡] *10*			L	
5026[‡] *10*			L	
5062 *10*	4^+		G L	XREF: G(5065)L(5060). Jπ: From L(t,p)=4. E(level): from weighted average of 5060 *10* (p,p′),(p,p′γ) and 5065 *12* (t,p).
5085.8 *4*	(7)		X	Jπ: from DCO and 1043γ to 5^+.
5113.6 *5*	2^+[e]		G I L V	
5156[‡] *10*			L	
5189.62 *12*	2^+[d]		GHI L S V	
5191[‡] *10*			L r	XREF: r(5200).
5215[‡] *10*			L r	XREF: r(5200).
5226.56 *11*	2^+[d]		HI L V	XREF: I(5230)L(5225).
5268.46 *10*	2^+[d]		H L V	
5275 *7*	2^+		G I L	E(level): from weighted average of 5275 *10* (p,p′),(p,p′γ) 5275 *10* (t,p), and 5275 *9* (d,p).
5291.3 *6*	2^+[e]		l V	XREF: l(5290). Jπ: γ′s to 2^+, 0^+.
5294.23 *9*	1^+,2^+		HI l V	XREF: I(5298)l(5290). Jπ: from (pol n,γ) and γγ(θ), L(d,p)=1.
5321[‡] *10*			L S	XREF: S(5310).
5345.7 *12*	2^-[e]		L V	XREF: L(5350).
5363.9[h] *3*	7^+	0.24[b] ps *6*	C E g X	XREF: E(5370)g(5366). Jπ: from 682.3γ to 8^+, 2141.3γ to 6^+, 1319.9γ to 5^+.
5387 *10*			g I	XREF: g(5366).
5458 *6*	2^+		G I	Jπ: From L(t,p)=2. E(level): from weighted average of 5459 *10* (t,p) and 5457 *6* (d,p).
5498 *10*			I	
5557 *7*	4^+		G I	XREF: G(5555)I(5560). Jπ: From L(t,p)=4. E(level): from weighted average of 5560 *10* (t,p) and 5555 *7* (d,p).
5586.94 *7*	1^+,2^+[e]		GHI S V	XREF: G(5583)I(5590)S(5574).
5670 *10*			I	
5698 *10*			I	
5740 *10*			I	
5771 *12*			S	
5797.9[g] *5*	(7)		I X	Jπ: from 1110.9γ to 8^+, 2575.7γ to 6^+.
5821.50 *13*			HI M	XREF: I(5829)M(5840).
5856.4 *4*			HI	XREF: I(5863).
5893 *10*	(+)		I	Jπ: from L(d,p)=(1).
5935 *10*			E I	XREF: E(5950).
5981 *10*			I S	XREF: S(5983).
6113 *10*			I S	XREF: S(6104).
6120 *10*			I	
6142.31 *17*			HI	XREF: I(6148).
6193 *10*			I	
6212 *10*			I	
6255 *10*			I	
6289 *10*			I	
6316.39 *9*			HI	
6350 *10*			I	
6374 *10*			I	

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Adopted Levels, Gammas (continued)

^{54}Cr Levels (continued)

E(level)[†]	Jπ[&]	$T_{1/2}$[a]	XREF	Comments
6391 *10*			I	
6421 *10*			I	
6446.2 *6*	(9)		X	Jπ: from 1360.4γ to (7).
6510 *10*			I	
6525 *10*			I	
6556 *10*			I	
6585 *10*			I	
6617.8[h] *4*	9^+		X	Jπ: from 1254.2γ to 7^+ and 1936.0γ to $(8)^+$.
6633 *10*			I	
6658 *10*			I	
6678 *10*			I	
6699[#] *10*			E G	
6719.52 *79*	(10^+)	<0.10[b] ps	C I	
6726.2[f] *7*	$(10)^+$		X	Jπ: from 2042γ E2 to $(8)^+$.
6743 *10*			I	
6780 *10*			I	
6814 *10*			I	
6831 *10*			I	
6875 *10*			I	
6899 *10*			I	
6941 *10*			I	
6960 *10*			I	
6991[#] *10*			E G I	XREF: E(7000)I(7000).
7050 *10*			I	
7084 *10*			I	
7103 *10*			I	
7127 *10*			I	
7159 *10*			I	
7174 *10*			I	
7199 *10*			I M	
7235.3 *4*	(9)		X	Jπ: from 6184γ to 9^+, 1870γ to 7^+, 2555γ to 8^+.
7292.1[g] *5*	(9)		X	Jπ: from 1494γ to (7), 1928γ to 7^+, 2611γ to 8^+.
7370			I	
7400[@]			E	
7590	$(^-)$		I	Jπ: from L(d,p)=(0).
7850[@]			E	
7895.0 *9*	(10)		X	Jπ: from 3213γ to 8^+.
8236.9[h] *6*	(11^+)		X	Jπ: 1513γ to 10^+, 1619γ to 9^+.
8300[@]			E	
8500[@]			E	
8825.4[f] *8*	(12^+)		X	Jπ: from 2101γ to $(10)^+$.
8859.1[g] *7*	(10)		X	Jπ: from 1567γ to (9).
8990	$^+$		M	Jπ: from unresolved L=8 and L=6 in (α,^{2}He).
9154.4 *6*	(11)		X	Jπ: from 1919γ to (9), 2430γ to 10^+.
9300[@]			E	
9420	$^+$		M	Jπ: from unresolved L=8 and L=6 in (α,^{2}He).
9634.4 *9*	(12^+)		X	Jπ: from 2910γ to 10^+.
9971.8[h] *8*	(13^+)		X	Jπ: from 1735γ to (11^+).
10551.6 *11*	(11^+)		X	Jπ: from 3827γ to 10^+.
11115.9[g] *9*	(11)		X	Jπ: from 2257γ to (10).
11785.9[h] *9*	(15^+)		X	Jπ: from 1814γ to 13^+.
12539.9 *11*	(13)		X	Jπ: from 3385γ to (11).

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Adopted Levels, Gammas (continued)

^{54}Cr Levels (continued)

† Energies for states connected by γ-rays from using least-squares fits. Others from (d,p), except as noted.
‡ From (p,p′),(p,p′γ).
# From (t,p).
@ From (^{16}O,^{12}C).
& From L values reported in (t,p), except as noted.
a From DSAM in (α,pγ), except as noted.
b From (^{9}Be,3nγ).
c From (n,γ),(pol n,γ) E=th.
d From (n,γ),(pol n,γ) E=th and γγ(θ) measurements.
e Deduced both from primary and secondary gamma-rays in (n,γ) E=res.
f Band(A): Yrast sequence from (^{48}Ca,α2nγ).
g Band(B): Cascade based on (7) from (^{48}Ca,α2nγ).
h Band(C): Cascade based on (5$^+$) from (^{48}Ca,α2nγ).

γ(^{54}Cr)

E_i(level)	J_i^π	E_γ†	I_γb	E_f	J_f^π	Mult.†	δ†	Comments
834.855	2$^+$	834.848 *3*	100	0.0	0$^+$	E2		B(E2)(W.u.)=14.4 *6* E_γ: from ^{54}Mn ε decay. Mult.: from ax(exp) In ^{54}Mn ε decay.
1823.93	4$^+$	989.08@ *2*	100	834.855	2$^+$	E2		B(E2)(W.u.)=26 *9*
2619.68	2$^+$	1784.65@ *9*	100 *1*	834.855	2$^+$	M1+E2	−0.53 *18*	B(M1)(W.u.)=0.037 *9*; B(E2)(W.u.)=7 *4*
		2619.57 *9*	4.3 *3*	0.0	0$^+$	[E2]		B(E2)(W.u.)=0.20 *4*
2829.62	0$^+$	1994.56 *5*	100	834.855	2$^+$	E2		B(E2)(W.u.)=10 *+3−4*
3074.07	2$^+$	2239.07 *5*	100.0 *5*	834.855	2$^+$	M1+E2	0.02 *5*	B(M1)(W.u.)=0.273 *16*; B(E2)(W.u.)=0.05 *+23−5*
		3073.95 *18*	1.1 *2*	0.0	0$^+$	[E2]		B(E2)(W.u.)=0.26 *5*
3159.57	4$^+$	1336.0& *3*	100‡& *7*	1823.93	4$^+$			
		2325.0‡ *4*	69 *8*	834.855	2$^+$	[E2]		B(E2)(W.u.)=1.17 *+25−29*
3222.45	6$^+$	1398.63‡ *13*	100‡ *15*	1823.93	4$^+$	E2		B(E2)(W.u.)=18 *5*
3393.41	(1$^-$,2$^-$)	2558.45 *5*	100	834.855	2$^+$			
		3393.35 *7*	58 *5*	0.0	0$^+$			
3436.88	2$^+$	817.20 *7*	3.0 *4*	2619.68	2$^+$			
		2601.91 *8*	100 *6*	834.855	2$^+$	M1+E2	−0.11 *+12−16*	B(M1)(W.u.)=0.15 *6*; B(E2)(W.u.)=0.6 *+13−6*
3655.23	4$^+$	1831.27‡ *19*	100‡	1823.93	4$^+$	M1		B(M1)(W.u.)>0.60 Mult.: from RUL.
3720.03	1$^+$,2$^+$	890.41 *2*	12 *1*	2829.62	0$^+$			
		1100.38 *6*	17 *1*	2619.68	2$^+$			
		3719.84 *7*	100.0 *5*	0.0	0$^+$			
3785.71	(4)$^+$	563.68‡ *19*	42‡ *2*	3222.45	6$^+$			
		626.56‡ *27*	7‡ *3*	3159.57	4$^+$			
		1961.53‡ *11*	100‡ *10*	1823.93	4$^+$			
3798.54	4$^+$	639.35‡ *25*	80‡ *10*	3159.57	4$^+$			
		1974.33‡ *12*	100‡ *22*	1823.93	4$^+$			
		2964.29‡ *25*	78‡ *20*	834.855	2$^+$	[E2]		B(E2)(W.u.)=1.2 *4*
3861.02	2$^+$	1241.36 *7*	100 *6*	2619.68	2$^+$			
		3026.05 *6*	60 *5*	834.855	2$^+$			
3870.4		1250.8# *5*		2619.68	2$^+$			

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Adopted Levels, Gammas (continued)

γ(^{54}Cr) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[b]	E_f	J_f^π	Mult.[†]	Comments
3870.4		3034.6[#] *13*		834.855	2^+		
3925.55	2^+	205.62 *20*	17 *3*	3720.03	$1^+,2^+$		
		1095.7 *5*		2829.62	0^+		
		2101.1 *3*		1823.93	4^+		
		3090.63 *8*	100 *17*	834.855	2^+		
3927.69	2^+	3927.57 *9*	100	0.0	0^+		
3987.42		594.0[#] *2*	100[#]	3393.41	$(1^-,2^-)$		E_γ: not reported by 1980St04 in ^{51}V(α,p),(α,pγ).
4012.90	0^+	1394.3 *7*		2619.68	2^+		
		3177.93 *7*		834.855	2^+		
4043.3	5^+	820.4[a] *3*	100[a] *3*	3222.45	6^+		Additional information 2.
		2220.9[a] *6*	18.5[a] *11*	1823.93	4^+		Additional information 3.
4083.25	$(2,3,4)^+$	646.27[‡] *24*	4.9[‡] *9*	3436.88	2^+		
		923.29[‡] *20*	17.7[‡] *17*	3159.57	4^+		
		1009.25[‡] *16*	3.0[‡] *13*	3074.07	2^+		
		1463.51[‡] *9*	18.9[‡] *15*	2619.68	2^+		
		2259.35[‡] *11*	100[‡] *3*	1823.93	4^+		
4126.0	2	1052.0 *7*	100	3074.07	2^+		
4127.05	3^-	1508.24 *25*	46 *15*	2619.68	2^+		
		3292.11 *8*	100 *23*	834.855	2^+		
4190.8	2^+	3356.1 *5*		834.855	2^+		
		4189.8 *9*		0.0	0^+		
4217.51	$(2)^+,3^+$	1597.72 *4*	27 *18*	2619.68	2^+		
		2394.82[‡] *36*	76 *36*	1823.93	4^+		
		3382.96[‡] *18*	100 *20*	834.855	2^+		
4239.1	2^+	1619.8 *9*		2619.68	2^+		
		3403.9 *6*		834.855	2^+		
4256.4	2^+	3421.4 *4*		834.855	2^+		
		4256.2 *9*		0.0	0^+		
4380.95	(2^-)	3545.92 *13*	100	834.855	2^+		
4451.0	4^+	2627.00[‡] *42*	100[‡]	1823.93	4^+		
4458.4	$1^+,(2^+)$	4458.2 *5*	100	0.0	0^+		
4570.8	$(2^-),3^-$	2746.8 *9*	100	1823.93	4^+		
4633.60	2^+	1804.00 *14*		2829.62	0^+		
		2013.5 *4*		2619.68	2^+		
4681.5	$(8)^+$	1459.1[a] *4*	100[a]	3222.45	6^+	E2[a]	B(E2)(W.u.)=12.8 *17* Additional information 4. Mult.: from $\gamma(\theta)$ In ^{12}C(^{48}Ca,α2nγ) and RUL.
4844.7	2^-	4009.7 *9*	100	834.855	2^+		
4872.36	2^+	745.37 *16*	5.7 *9*	4127.05	3^-		
		944.57 *19*	2.8 *9*	3927.69	2^+		
		946.80 *15*	4.7 *9*	3925.55	2^+		
		1435.49 *18*	21.79 *19*	3436.88	2^+		
		1712.4 *3*		3159.57	4^+		
		1798.22 *5*	23.6 *19*	3074.07	2^+		
		4872.27 *10*	100 *8*	0.0	0^+		
5085.8	(7)	1042.7[a] *4*	100[a]	4043.3	5^+		Additional information 5.
5113.6	2^+	4278.3 *6*		834.855	2^+		
		5113.9 *9*		0.0	0^+		
5189.62	2^+	1106.38 *10*		4083.25	$(2,3,4)^+$		
		2358.2 *10*		2829.62	0^+		
		5189.6 *14*		0.0	0^+		
5226.56	2^+	845.57 *12*		4380.95	(2^-)		

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Adopted Levels, Gammas (continued)

γ(^{54}Cr) (continued)

E_i(level)	J_i^π	E_γ †	I_γ [b]	E_f	J_f^π	Mult. †	Comments
5226.56	2^+	2066.99 *7*		3159.57	4^+		
		4390.7 *4*		834.855	2^+		
5268.46	2^+	1340.81 *10*		3927.69	2^+		
		1831.34 *17*		3436.88	2^+		
		4433.43 *21*		834.855	2^+		
		5268.3 *11*		0.0	0^+		
5291.3	2^+	4455.9 *9*		834.855	2^+		
		5291.3 *7*		0.0	0^+		
5294.23	$1^+,2^+$	2464.23 *19*	23 *8*	2829.62	0^+		
		2674.49 *11*	53 *5*	2619.68	2^+		
		4459.28 *21*	100 *13*	834.855	2^+		
5345.7	2	4510.6 *12*	100	834.855	2^+		
5363.9	7^+	278.3[a] *3*	2.9[a] *3*	5085.8	(7)		
		682.3[a] *3*	100[a] *10*	4681.5	$(8)^+$		Additional information 6.
		1319.9[a] *5*	25[a] *1*	4043.3	5^+		Additional information 7.
		2141.3[a] *6*	38[a] *2*	3222.45	6^+		Additional information 8.
5586.94	$1^+,2^+$	1460.10 *14*	22 *11*	4127.05	3^-		
		1503.62 *9*	33 *11*	4083.25	$(2,3,4)^+$		
		2967.05 *19*	94 *17*	2619.68	2^+		
		4751.83 *10*	100 *22*	834.855	2^+		
5797.9	(7)	1110.9[a] *4*	22.9[a] *15*	4689.1			Additional information 9.
		2575.7[a] *6*	100[a] *3*	3222.45	6^+		Additional information 10.
5821.50		2101.43 *12*	100	3720.03	$1^+,2^+$		
5856.4		5021.29 *34*	100	834.855	2^+		
6142.31		847.90 *17*	100 *12*	5294.23	$1^+,2^+$		
		2749.56 *36*	62 *25*	3393.41	$(1^-,2^-)$		
6316.39		2233.09 *6*	100	4083.25	$(2,3,4)^+$		
6446.2	(9)	1360.4[a] *4*	100[a]	5085.8	(7)		Additional information 11.
6617.8	9^+	1254.2[a] *4*	100[a] *4*	5363.9	7^+	*a*	Additional information 12.
		1936.0[a] *5*	47[a] *2*	4681.5	$(8)^+$		Additional information 13.
6719.52	(10^+)	2038.9 *8*	100	4681.5	$(8)^+$	E2	B(E2)(W.u.)>13 E_γ: From (^{9}Be,3nγ).
6726.2	$(10)^+$	2042.5[a] *5*	100[a]	4681.5	$(8)^+$	E2[a]	Additional information 14.
7235.3	(9)	617.6[a] *4*	56[a] *3*	6617.8	9^+		Additional information 15.
		1870.5[a] *5*	94[a] *3*	5363.9	7^+		Additional information 16.
		2554.9[a] *6*	100[a] *3*	4681.5	$(8)^+$		Additional information 17.
7292.1	(9)	1494.3[a] *4*	70[a] *4*	5797.9	(7)		Additional information 18.
		1927.9[a] *5*	31.1[a] *15*	5363.9	7^+		Additional information 19.
		2610.6[a] *6*	100[a] *4*	4681.5	$(8)^+$		Additional information 20.
7895.0	(10)	3213.4[a] *8*	100[a] *6*	4681.5	$(8)^+$		Additional information 21.
8236.9	(11^+)	1512.7[a] *5*	14.6[a] *11*	6726.2	$(10)^+$		
		1619.2[a] *5*	100[a] *4*	6617.8	9^+	*a*	Additional information 22.
8825.4	(12^+)	2101.2[a] *6*	100[a]	6726.2	$(10)^+$		Additional information 23.
8859.1	(10)	1567.0[a] *5*	100[a]	7292.1	(9)		Additional information 24.
9154.4	(11)	1919.0[a] *5*	41[a] *4*	7235.3	(9)		Additional information 25.
		2430.2[a] *6*	100[a] *4*	6726.2	$(10)^+$		Additional information 26.
9634.4	(12^+)	2910.2[a] *7*	100[a]	6726.2	$(10)^+$		Additional information 27.
9971.8	(13^+)	1734.8[a] *5*	100[a]	8236.9	(11^+)		Additional information 28.
10551.6	(11^+)	3827.3[a] *9*	100[a]	6726.2	$(10)^+$		Additional information 29.
11115.9	(11)	2256.7[a] *6*	100[a]	8859.1	(10)		Additional information 30.
11785.9	(15^+)	1814.1[a] *5*	100[a]	9971.8	(13^+)		Additional information 31.
12539.9	(13)	3385.4[a] *9*	100[a]	9154.4	(11)		Additional information 32.

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

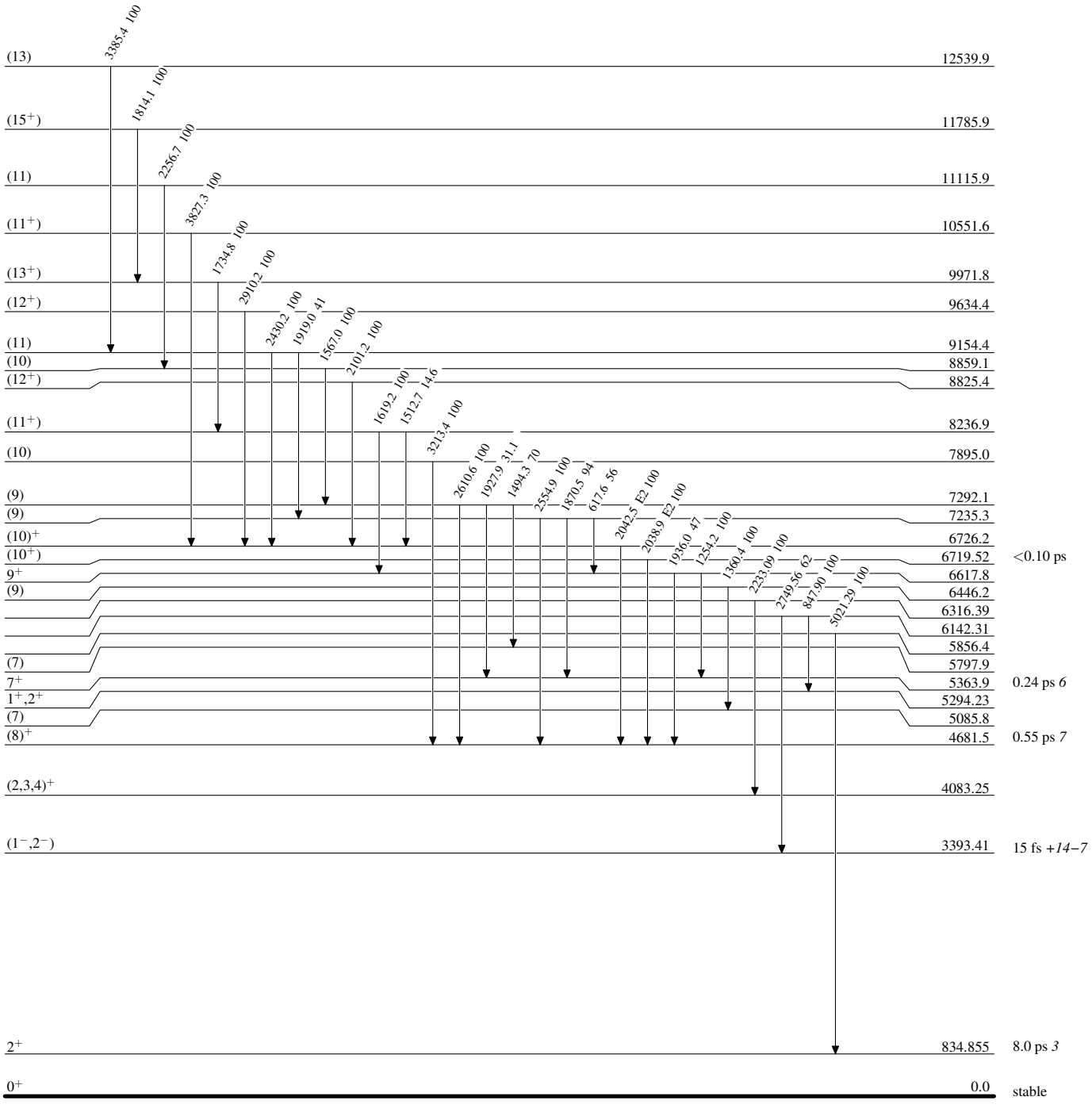
$\gamma(^{54}Cr)$ (continued)

† From (n,γ),(pol n,γ) E=th, except as noted.
‡ From ^{54}V β^- decay.
# From (α,pγ).
@ From weighted average of values in (n,γ),(pol n,γ) E=th and ^{54}V β^- decay.
& From weighted average of values in (α,pγ) and ^{54}V β^- decay.
a From (^{48}Ca,α2nγ).
b Branching ratio from (n,γ),(pol n,γ) E=th, except as noted.

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level

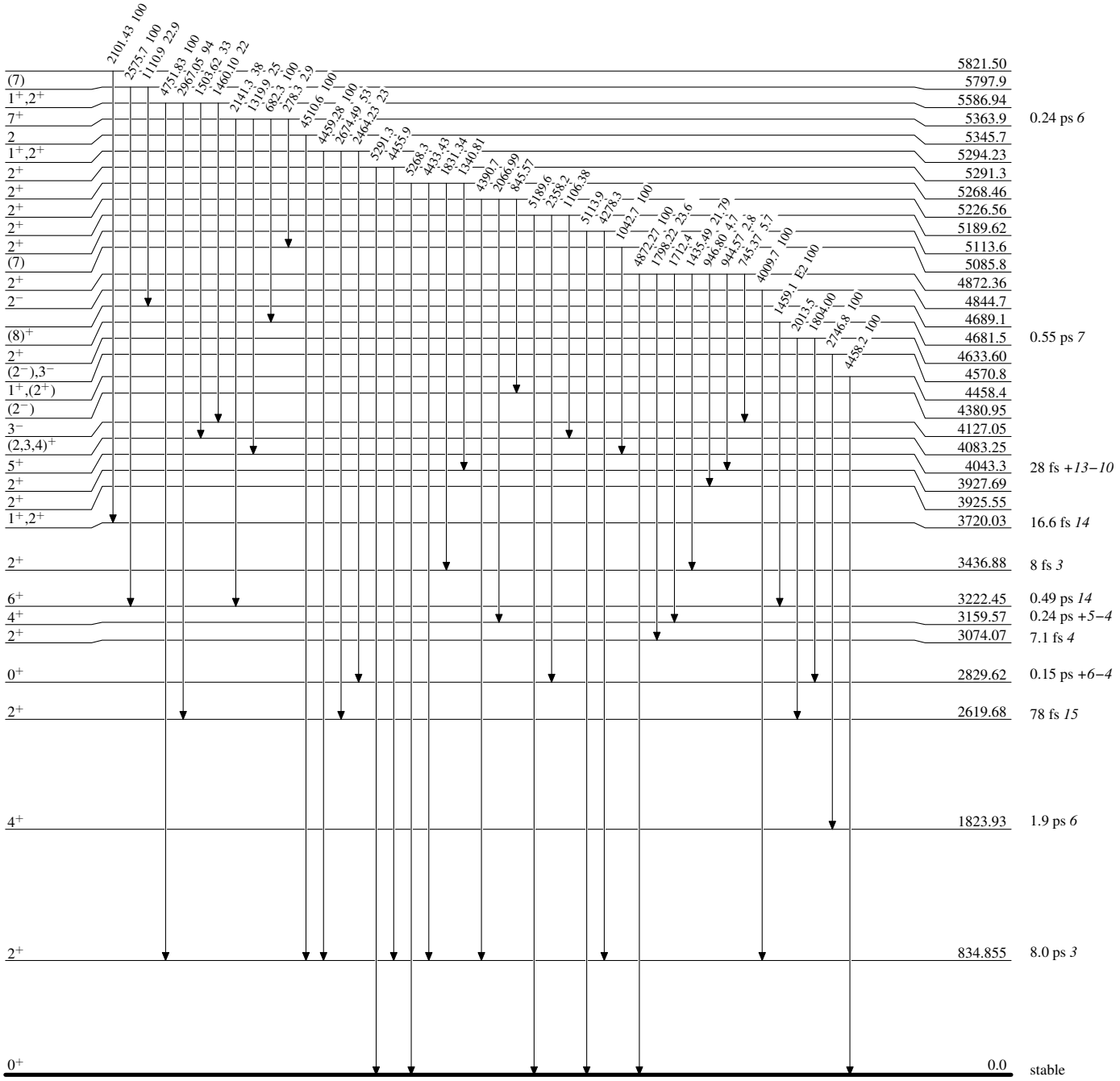


$^{54}_{24}Cr_{30}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

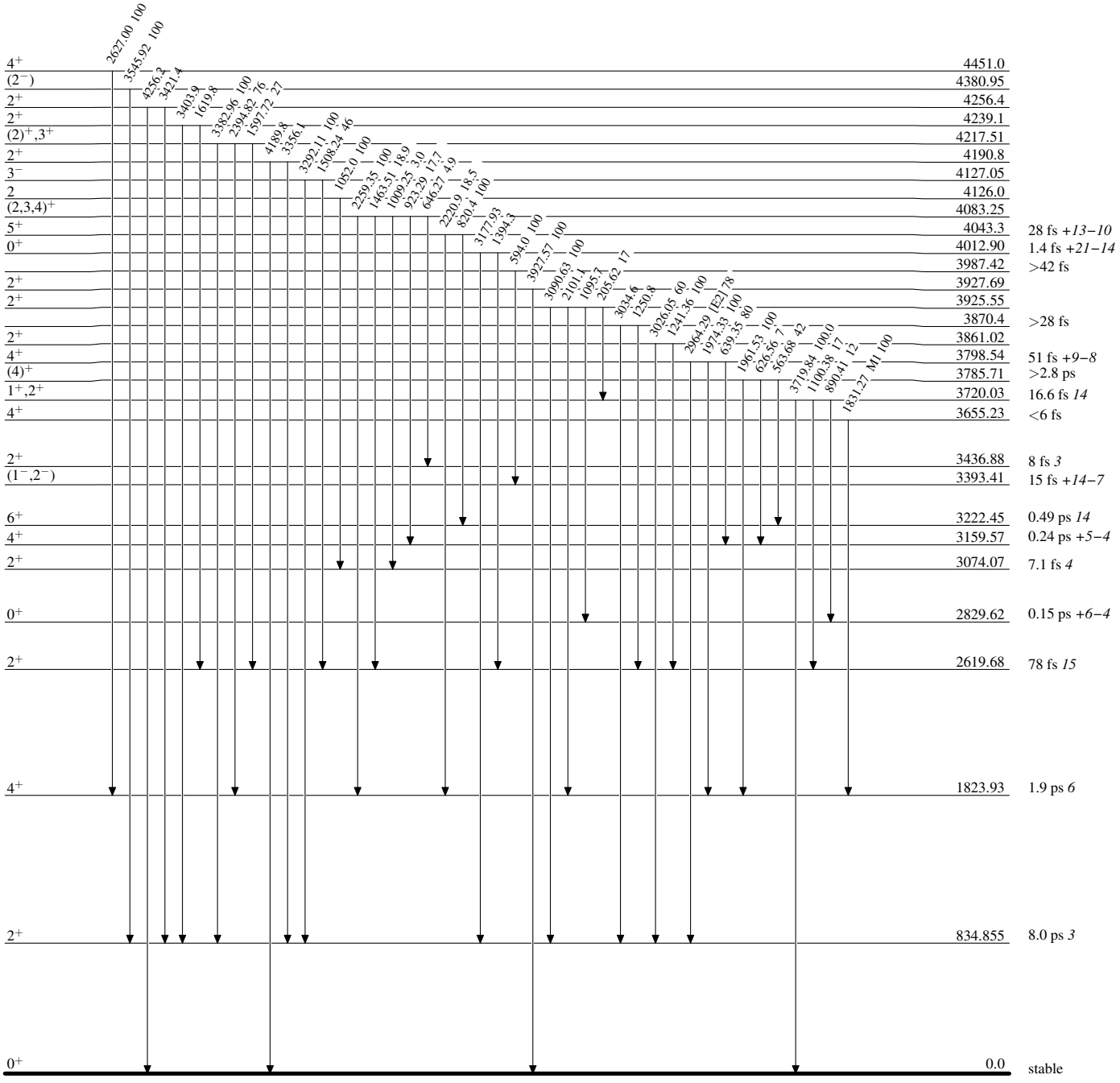


$^{54}_{24}Cr_{30}$

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

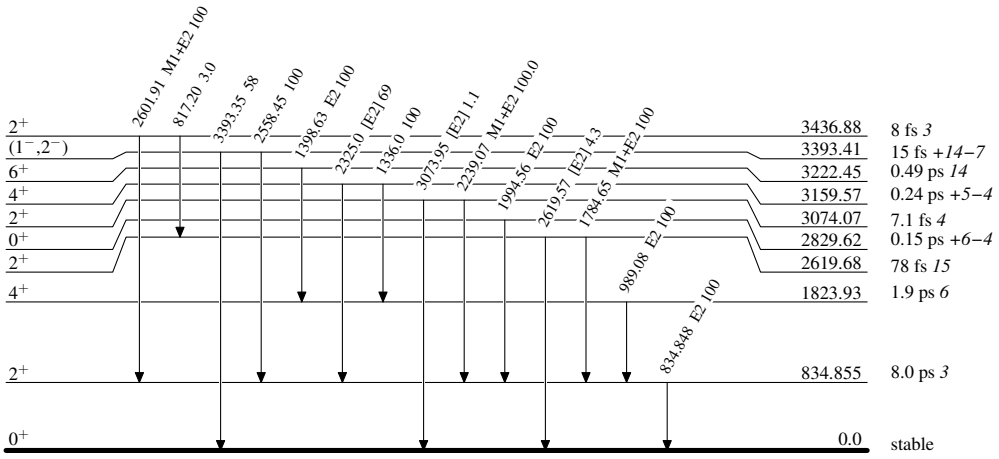


$^{54}_{24}Cr_{30}$

Adopted Levels, Gammas

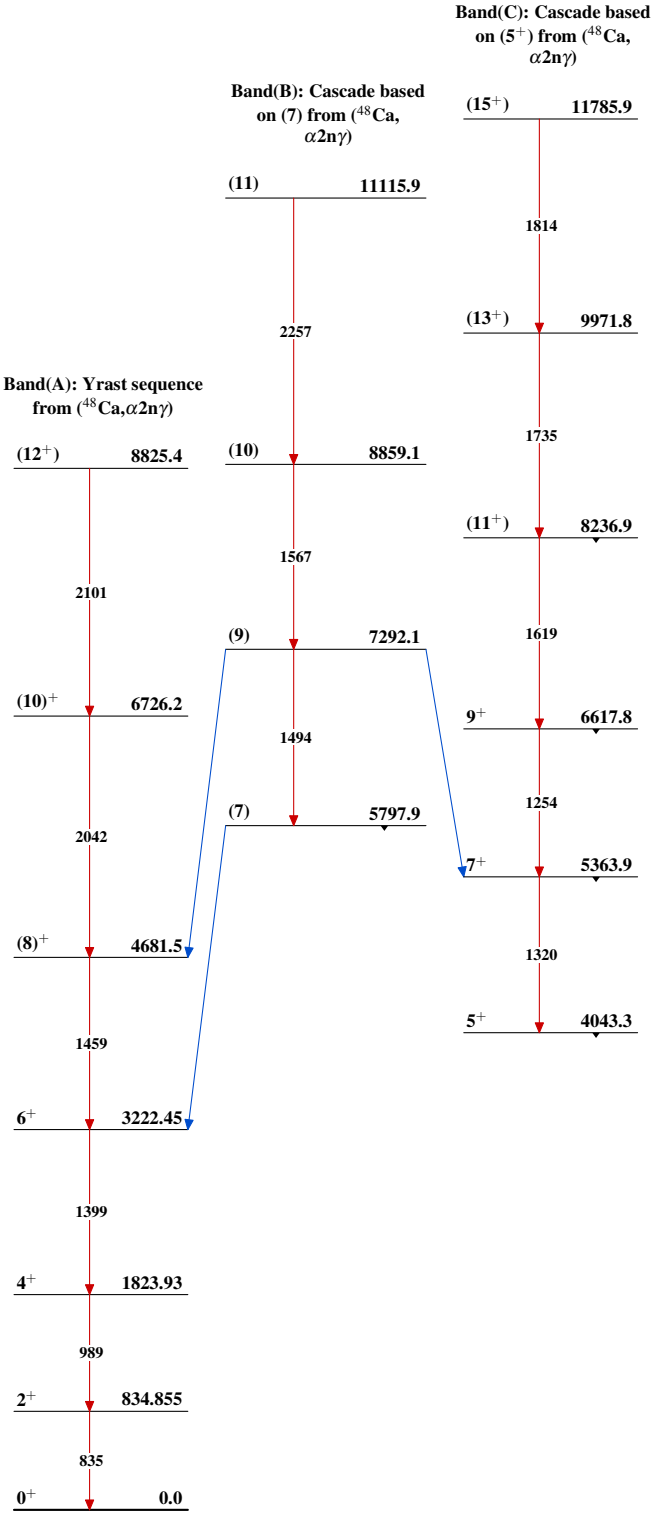
Level Scheme (continued)

Intensities: Relative photon branching from each level



$^{54}_{24}Cr_{30}$

Adopted Levels, Gammas



$^{54}_{24}Cr_{30}$