Adopted Levels, Gammas

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	S. K. Basu, G. Mukherjee, A. A. Sonzogni	NDS 111,2555 (2010)	30-Jun-2009

Q(β^-)=−8376 *5*; S(n)=13504 *6*; S(p)=3046 *5*; Q(α)=−4779 *5* 2012Wa38
Note: Current evaluation has used the following Q record −8378 6 *13506* 6 *3052* 6 −4781 5 2009AuZZ.
S(2n)=25474 *6*, S(2p)=9315 *6* (2009AuZZ).
α: Additional information 1.

^{95}Rh Levels

Cross Reference (XREF) Flags

A	^{95}Rh IT decay (1.96 min)	D	^{96}Ag εp decay:4.40 s
B	^{95}Pd ε decay (13.3 s)	E	^{58}Ni(^{40}Ca,3pγ),^{64}Zn(^{36}Ar,p$\alpha\gamma$)
C	^{96}Ag εp decay:6.9 s	F	^{95}Rh IT decay (18.8 ns)

E(level)†	Jπ‡	$T_{1/2}$#	XREF	Comments
0.0@	9/2$^+$	5.02 min *10*	ABCDEF	%ε+%β^+=100 Jπ: from log *ft*=5.3 to 7/2$^{(+)}$, no direct feeding to 5/2$^+$ ground state and log *ft*=5.8 to 9/2$^+$, supported by comparison with the neighboring N=50 nuclei and Shell model calculations. $T_{1/2}$: from γ_{942}(t) of ^{95}Ru (1975We03).
543.3 *3*	(1/2)$^-$	1.96 min *4*	A C	%IT=88 *5* (1975We03); %ε+%β^+=12 *5* Jπ: 1/2$^-$,3/2$^-$ from log *ft*=6.0 *+6−4* to 1/2$^+$ and log *ft*=4.8 *+4−3* to (3/2$^-$). 1/2 from shell model. %ε+%β^+,%IT: from comparison of Iγ(543γ) with intensities of γ′s following ε decay of 543 state assuming mult(543γ)=M4. Other: %IT=85 from %Iγ(543γ)=77 (1981Gr20) and α(543γ)=0.102.
680 *5*	(7/2$^+$)		C	Jπ: by comparison of neighboring ^{93}Tc (N=50) level scheme. Also, from the non observation of this non-yrast state in fusion evaporation reaction and in the β^+ decay of the (21/2$^+$) isomer in ^{95}Pd Shell model predicts 7/2$^+$ at 650 keV (2003Ba39).
1180? *10*	(5/2$^+$)		C	Jπ: tentative assignment made in comparison to levels in ^{93}Tc (2003Ba39).
1350.97@ *16*	(13/2$^+$)		B DEF	
1430? *20*	(11/2$^+$)		D	Jπ: tentative assignment made in comparison to levels in ^{93}Tc (2003Ba39).
1570? *10*	(5/2$^-$,3/2$^+$)		C	Jπ: tentative assignment made in comparison to levels in ^{93}Tc (2003Ba39).
2067.53@ *21*	(17/2$^+$)		B EF	
2080 *10*	(15/2$^+$,17/2$^+$)		D	Jπ: from 2003Ba39, possible L=0 proton emission to this state from the (8$^+$) state in ^{96}Ag. E(level): according to 2003Ba39, this level could be identical to the 2067 keV level, though the assignment is not unique.
2236.37& *22*	(17/2$^-$)	18.8 ns *10*	B EF	g=1.29 *4* (1983Gr33) $T_{1/2}$: weighted av of 15 ns *5* (RDDS 1980No06) and 19 ns *1* (using pulsed beam 1983Gr33).
2264.10@ *19*	(17/2$^+$)		B E	
2449.13@ *20*	(21/2$^+$)	2.54 ns *22*	B E	$T_{1/2}$: weighted av of 2.1 ns *3* (1980No06) and 2.65 ns *15* (1998Ju05).
2973.13 *23*	(21/2$^+$,23/2$^+$)		B	Jπ: Tentative spin assignments from 1982Ku15 based on the decay scheme.
3095.9 *3*			B	
3129.43 *23*			B	

Continued on next page (footnotes at end of table)

Adopted Levels, Gammas (continued)

^{95}Rh Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$[#]	XREF	Comments
3241.3[&] *3*	(21/2⁻)	4.6 ps *2*	B E	$T_{1/2}$: Other 26 ps *4* (RDDS 1980No06). Probably not corrected for side feeding.
3723.7[@] *3*	(25/2⁺)	<1.4 ps	E	
3837.3 *3*			B	
3908.8[&] *3*	(25/2⁻)	24.9 ps *12*	E	g=0.90 *28* $T_{1/2}$: from 1998Ju05; Other: 31 ps *6* (RDDS 1980No06). Probably not corrected for side feeding. g: weighted average of two measurements, done with Fe- (1.28 *19*) and Ni-hosts (0.69 *14*) (1999Ju04).
4135.2 *5*			B	
4163.4 *5*			B	
4241.9[a] *3*	(21/2⁺)		E	
5458.3[a] *3*	(25/2⁺)	<1.4 ps	E	
6119.7[@] *3*	(27/2⁺)		E	
6212.2[a] *3*	(29/2⁺)	6.6 ps *6*	E	g=0.64 *31* g: Weighted average of two measurements, done with Fe- (0.80 *30*) and Ni-hosts (0.04 *59*) (1999Ju04).
6405.3 *3*	(27/2⁻)	<0.7 ps	E	
6585.4[b] *3*	(27/2⁻)	<0.7 ps	E	
6699.2 *3*	(29/2⁻)	0.85 ps *5*	E	
6795.1[a] *3*	(31/2⁺)	<0.7 ps	E	
7064.9?[b] *3*	(29/2⁻)		E	
7139.5[a] *3*	(33/2⁺)		E	
7512.6[b] *3*	(31/2⁻)		E	
7625.1[a] *3*	(35/2⁺)	14.8 ps *26*	E	g=0.41 *14* g: Weighted average of two measurements, done with Fe- and Ni-hosts (1999Ju04).
7846.2[b] *3*	(33/2⁻)	1.77 ps *15*	E	
8395.0[b] *3*	(35/2⁻)	1.86 ps *9*	E	
8656.0[b] *3*	(37/2⁻)	1.16 ps *22*	E	
8875.3[a] *4*	(39/2⁺)	<2.0 ps	E	
9346.6[b] *4*	(39/2⁻)	<1.0 ps	E	
10653.3[b] *4*	(41/2⁻)		E	
11368.0 *4*			E	
11967.1?[a] *4*	(41/2⁺)		E	
12113.9 *4*	(41/2⁺)		E	
12194.7 *4*			E	
12434.6 *4*	(43/2⁺)		E	
12869.1 *4*	(41/2⁻,43/2⁻)		E	
13876.4 *5*	(45/2⁺,47/2⁺)		E	

[†] From least-squares fit to Eγ′s for levels connected by transitions with known ΔE_γ.
[‡] From $\gamma(\theta)$ in (^{40}Ca,3pγ) and multipolarities of deexciting γ′s, except as noted.
[#] From recoil-distance measurements in 1998Ju05 (^{40}Ca,3pγ), except as noted.
[@] Band(A): +ve parity yrast band.
[&] Band(B): -ve parity yrast band.
[a] Band(C): +ve parity side band.
[b] Band(D): -ve parity side band.

Adopted Levels, Gammas (continued)

γ(^{95}Rh)

See ^{95}Pd ε decay for unplaced γ's.

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[#]	α	Comments
543.3	$(1/2)^-$	543.3 *3*	100	0.0	$9/2^+$	[M4]	0.1001	α(K)=0.0842 *12*; α(L)=0.01296 *19*; α(M)=0.00247 *4*; α(N)=0.000404 *6*; α(O)=1.79×10^{-5} *3* α(N+..)=0.000422 *6* B(M4)(W.u.)=38.7 *24* E_γ: from ^{95}Rh IT decay (1.96 min).
680	$(7/2^+)$	680[@] *5*	100	0.0	$9/2^+$			
1180?	$(5/2^+)$	1180[@a] *10*	100	0.0	$9/2^+$			
1350.97	$(13/2^+)$	1350.96 *16*	100	0.0	$9/2^+$	(E2)	0.000531 *8*	α(K)=0.000434 *6*; α(L)=4.98×10^{-5} *7*; α(M)=9.22×10^{-6} *13*; α(N)=1.530×10^{-6} *22* α(O)=7.80×10^{-8} *11*; α(N+..)=3.84×10^{-5} *6* Mult.: Q from γ(θ); assumed E2 by 1980No06. E_γ: weighted average of 1351.06 *12* (^{95}Pd ε decay (13.3 s)), 1350.7 *2* (^{58}Ni(^{40}Ca,3pγ), ^{64}Zn(^{36}Ar,pαγ)).
1430?	$(11/2^+)$	1430[@a] *20*	100	0.0	$9/2^+$			
1570?	$(5/2^-,3/2^+)$	1027[@a] *10*	100	543.3	$(1/2)^-$			
2067.53	$(17/2^+)$	716.52 *16*	100	1350.97	$(13/2^+)$	(E2)	0.00211 *3*	α(K)=0.00184 *3*; α(L)=0.000221 *3*; α(M)=4.10×10^{-5} *6*; α(N)=6.75×10^{-6} *10*; α(O)=3.27×10^{-7} *5* α(N+..)=7.08×10^{-6} *10* Mult.: Q from γ(θ); assumed E2 by 1980No06. E_γ: weighted average of 716.6 *1* (^{95}Pd ε decay (13.3 s)), 716.2 *2* (^{58}Ni(^{40}Ca,3pγ), ^{64}Zn(^{36}Ar,pαγ)).
2080	$(15/2^+,17/2^+)$	729[a] *10*	100	1350.97	$(13/2^+)$			
2236.37	$(17/2^-)$	168.84 *9*	100	2067.53	$(17/2^+)$	(E1)[&]	0.0324	α(K)=0.0284 *4*; α(L)=0.00333 *5*; α(M)=0.000615 *9*; α(N)=0.0001007 *15*; α(O)=4.72×10^{-6} *7* α(N+..)=0.0001053 *15* B(E1)(W.u.)=3.48×10^{-6} *19* E_γ: weighted average of 168.8 *1* (^{95}Pd ε decay (13.3 s)), 169.0 *2* (^{58}Ni(^{40}Ca,3pγ), ^{64}Zn(^{36}Ar,pag.
2264.10	$(17/2^+)$	913.14 *12*	100	1350.97	$(13/2^+)$	(E2)	0.001163 *17*	α(K)=0.001018 *15*; α(L)=0.0001196 *17*; α(M)=2.22×10^{-5} *4* α(O)=1.82×10^{-7} *3*; α(N+..)=3.85×10^{-6} E_γ: weighted average of 913.2 *1* (^{95}Pd ε decay (13.3 s)), 912.9 *2* (^{58}Ni(^{40}Ca,3pγ), ^{64}Zn(^{36}Ar,pαγ)).
2449.13	$(21/2^+)$	185.04 *9*	12.7 *4*	2264.10	$(17/2^+)$	(E2)	0.1495	α(K)=0.1253 *18*; α(L)=0.0199 *3*; α(M)=0.00373 *6*; α(N)=0.000593 *9*; α(O)=2.00×10^{-5} *3* α(N+..)=0.000613 *9*

Adopted Levels, Gammas (continued)

γ(^{95}Rh) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[#]	α	Comments
								B(E2)(W.u.)=4.4 *5* E_γ: weighted average of 185.0 *1* (^{95}Pd ε decay (13.3 s)), 185.2 *2* (^{58}Ni(^{40}Ca,3pγ), ^{64}Zn(^{36}Ar,pαγ)). I_γ: weighted average of 12.8 *4* (^{95}Pd ε decay (13.3 s)), 11.5 *15* (^{58}Ni(^{40}Ca,3pγ), ^{64}Zn(^{36}Ar,pαγ)).
2449.13	(21/2$^+$)	381.59 *17*	100.0 *21*	2067.53	(17/2$^+$)	(E2)	0.01289	α(K)=0.01112 *16*; α(L)=0.001451 *21*; α(M)=0.000270 *4*; α(N)=4.40×10^{-5} *7*; α(O)=1.91×10^{-6} *3* α(N+..)=4.59×10^{-5} *7* B(E2)(W.u.)=0.92 *9* E_γ: weighted average of 381.8 *1* (^{95}Pd ε decay (13.3 s)), 381.5 *2* (^{58}Ni(^{40}Ca,3pγ), ^{64}Zn(^{36}Ar,pαγ)). I_γ: weighted average of 100 *3* (^{95}Pd ε decay (13.3 s)), 100 *3* (^{58}Ni(^{40}Ca,3pγ), ^{64}Zn(^{36}Ar,pαγ)).
2973.13	(21/2$^+$,23/2$^+$)	524.0 *1*	100	2449.13	(21/2$^+$)			
3095.9		859.9 *3*	16 *5*	2236.37	(17/2$^-$)			
		1028.2 *2*	100 *6*	2067.53	(17/2$^+$)			
3129.43		680.3 *1*	100	2449.13	(21/2$^+$)			
3241.3	(21/2$^-$)	1004.95 *15*	100	2236.37	(17/2$^-$)	(E2)	0.000933 *13*	α(K)=0.000817 *12*; α(L)=9.54×10^{-5} *14*; α(M)=1.768×10^{-5} *25* α(O)=1.466×10^{-7} *21*; α(N+..)=3.07×10^{-6} B(E2)(W.u.)=4.66 *21* E_γ: weighted average of 1005.1 *2* (^{95}Pd ε decay (13.3 s)), 1004.8 *2* (^{58}Ni(^{40}Ca,3pγ), ^{64}Zn(^{36}Ar,pαγ)).
3723.7	(25/2$^+$)	1274.7[‡] *2*	100	2449.13	(21/2$^+$)	(E2)	0.000577 *8*	α(K)=0.000489 *7*; α(L)=5.63×10^{-5} *8*; α(M)=1.042×10^{-5} *15*; α(O)=8.79×10^{-8} *13* α(N+..)=2.17×10^{-5} *3* B(E2)(W.u.)>4.7
3837.3		1600.6 *3*	100 *4*	2236.37	(17/2$^-$)			
		1770.5 *5*	17 *3*	2067.53	(17/2$^+$)			
3908.8	(25/2$^-$)	667.4 *2*	100	3241.3	(21/2$^-$)	(E2)	0.00253 *4*	α(K)=0.00221 *3*; α(L)=0.000267 *4*; α(M)=4.96×10^{-5} *7*; α(N)=8.17×10^{-6} *12*; α(O)=3.92×10^{-7} *6* α(N+..)=8.56×10^{-6} *12* B(E2)(W.u.)=6.6 *4*
4135.2		1898.8 *5*	100	2236.37	(17/2$^-$)			
4163.4		1927.0 *5*	100	2236.37	(17/2$^-$)			
4241.9	(21/2$^+$)	1792.7 *2*	100	2449.13	(21/2$^+$)			
5458.3	(25/2$^+$)	1216.4 *2*	14 *4*	4241.9	(21/2$^+$)	(E2)	0.000625 *9*	α(K)=0.000539 *8*; α(L)=6.22×10^{-5} *9*; α(M)=1.152×10^{-5} *17*; α(N)=1.91×10^{-6} *3* α(O)=9.69×10^{-8} *14*; α(N+..)=1.173×10^{-5} *17* B(E2)(W.u.)>0.72

$^{95}_{45}Rh_{50}$-4

Adopted Levels, Gammas (continued)

γ(^{95}Rh) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[#]	α	Comments
5458.3	(25/2$^+$)	1734.4[‡] *2*	100 *5*	3723.7	(25/2$^+$)	(M1)	0.000487 *7*	α(K)=0.000287 *4*; α(L)=3.24×10^{-5} *5*; α(M)=6.00×10^{-6} *9*; α(N)=9.99×10^{-7} *14* α(O)=5.22×10^{-8} *8*; α(N+..)=0.0001614 *23* B(M1)(W.u.)>0.0026
6119.7	(27/2$^+$)	661.3 *2*	100 *18*	5458.3	(25/2$^+$)			
		2396.1 *2*	39 *12*	3723.7	(25/2$^+$)			
6212.2	(29/2$^+$)	92.8 *2*	13 *3*	6119.7	(27/2$^+$)	(M1)	0.423	α(K)=0.368 *6*; α(L)=0.0450 *7*; α(M)=0.00839 *13*; α(N)=0.001389 *22*; α(O)=6.90×10^{-5} *11* α(N+..)=0.001458 *23* B(M1)(W.u.)=0.28 *8*
		753.7 *2*	100 *8*	5458.3	(25/2$^+$)	(E2)	0.00185 *3*	α(K)=0.001617 *23*; α(L)=0.000193 *3*; α(M)=3.59×10^{-5} *5*; α(N)=5.92×10^{-6} *9*; α(O)=2.88×10^{-7} *4* α(N+..)=6.21×10^{-6} *9* B(E2)(W.u.)=7.2 *10*
		2488.5 *2*	72 *6*	3723.7	(25/2$^+$)	(E2)	0.000696 *10*	α(K)=0.0001379 *20*; α(L)=1.549×10^{-5} *22*; α(M)=2.86×10^{-6} *4* α(O)=2.48×10^{-8} *4*; α(N+..)=0.000540 B(E2)(W.u.)=0.0132 *18*
6405.3	(27/2$^-$)	2496.4 *2*	100	3908.8	(25/2$^-$)	(M1)	0.000674 *10*	α(K)=0.0001413 *20*; α(L)=1.587×10^{-5} *23*; α(M)=2.94×10^{-6} *5* α(O)=2.56×10^{-8} *4*; α(N+..)=0.000514 B(M1)(W.u.)>0.0020
6585.4	(27/2$^-$)	2676.6 *2*	100	3908.8	(25/2$^-$)	(M1)	0.000738 *11*	α(K)=0.0001241 *18*; α(L)=1.392×10^{-5} *20*; α(M)=2.57×10^{-6} *4* α(O)=2.25×10^{-8} *4*; α(N+..)=0.000598 B(M1)(W.u.)>0.0016
6699.2	(29/2$^-$)	114.1 *2*	5.8 *19*	6585.4	(27/2$^-$)	(M1)	0.237	α(K)=0.207 *3*; α(L)=0.0251 *4*; α(M)=0.00468 *7*; α(N)=0.000776 *12*; α(O)=3.87×10^{-5} *6* α(N+..)=0.000814 *12* B(M1)(W.u.)=0.8 *3*
		293.8 *2*	23 *4*	6405.3	(27/2$^-$)	(M1)	0.0190	α(K)=0.01660 *24*; α(L)=0.00197 *3*; α(M)=0.000365 *6*; α(N)=6.06×10^{-5} *9*; α(O)=3.08×10^{-6} *5* α(N+..)=6.37×10^{-5} *9* B(M1)(W.u.)=0.18 *4*
		2790.3 *2*	100 *4*	3908.8	(25/2$^-$)	(E2)	0.000807 *12*	α(K)=0.0001132 *16*; α(L)=1.269×10^{-5} *18*; α(M)=2.34×10^{-6} *4* α(O)=2.04×10^{-8} *3*; α(N+..)=0.000679 B(E2)(W.u.)=0.117 *10*
6795.1	(31/2$^+$)	582.9[‡] *2*	100	6212.2	(29/2$^+$)	(M1)	0.00354 *5*	α(K)=0.00310 *5*; α(L)=0.000360 *5*; α(M)=6.67×10^{-5} *10*; α(N)=1.109×10^{-5} *16*; α(O)=5.71×10^{-7} *8* α(N+..)=1.166×10^{-5} *17* B(M1)(W.u.)>0.16
7064.9?	(29/2$^-$)	479.4 *2*	100	6585.4	(27/2$^-$)			

Adopted Levels, Gammas (continued)

γ(^{95}Rh) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[#]	α	Comments
7139.5	(33/2$^+$)	344.4 *2*	100	6795.1	(31/2$^+$)			
7512.6	(31/2$^-$)	447.5 *2*	100 *35*	7064.9?	(29/2$^-$)			
		813.3 *2*	83 *28*	6699.2	(29/2$^-$)			
7625.1	(35/2$^+$)	485.6 *2*	44 *7*	7139.5	(33/2$^+$)	(M1)	0.00547 *8*	α(K)=0.00479 *7*; α(L)=0.000558 *8*; α(M)=0.0001036 *15*; α(N)=1.721×10^{-5} *25* α(O)=8.83×10^{-7} *13*; α(N+..)=1.81×10^{-5} *3* B(M1)(W.u.)=0.0040 *10*
		830.1 *2*	100 *5*	6795.1	(31/2$^+$)	(E2)	0.001460 *21*	α(K)=0.001276 *18*; α(L)=0.0001511 *22*; α(M)=2.80×10^{-5} *4* α(O)=2.28×10^{-7} *4*; α(N+..)=4.86×10^{-6} B(E2)(W.u.)=2.6 *5*
7846.2	(33/2$^-$)	333.3 *2*	40 *5*	7512.6	(31/2$^-$)	(M1)	0.01380	α(K)=0.01207 *17*; α(L)=0.001423 *20*; α(M)=0.000264 *4*; α(N)=4.39×10^{-5} *7*; α(O)=2.24×10^{-6} *4* α(N+..)=4.61×10^{-5} *7* B(M1)(W.u.)=0.096 *16*
		1147.2 *2*	100 *5*	6699.2	(29/2$^-$)	(E2)	0.000699 *10*	α(K)=0.000611 *9*; α(L)=7.07×10^{-5} *10*; α(M)=1.310×10^{-5} *19* α(O)=1.097×10^{-7} *16*; α(N+..)=4.62×10^{-6} *7* B(E2)(W.u.)=4.4 *5*
8395.0	(35/2$^-$)	548.9 *2*	100 *7*	7846.2	(33/2$^-$)	(M1)	0.00408 *6*	α(K)=0.00357 *5*; α(L)=0.000415 *6*; α(M)=7.70×10^{-5} *11*; α(N)=1.280×10^{-5} *18*; α(O)=6.58×10^{-7} *10* α(N+..)=1.346×10^{-5} *19* B(M1)(W.u.)=0.065 *8*
		769.9 *2*	10 *4*	7625.1	(35/2$^+$)	(E1)	0.000680 *10*	α(K)=0.000597 *9*; α(L)=6.79×10^{-5} *10*; α(M)=1.254×10^{-5} *18* α(O)=1.060×10^{-7} *15*; α(N+..)=2.19×10^{-6} *3* B(E1)(W.u.)=3.5×10^{-5} *15*
8656.0	(37/2$^-$)	261.0 *2*	100 *4*	8395.0	(35/2$^-$)	(M1)	0.0257	α(K)=0.0225 *4*; α(L)=0.00267 *4*; α(M)=0.000496 *7*; α(N)=8.24×10^{-5} *12*; α(O)=4.18×10^{-6} *6* α(N+..)=8.66×10^{-5} *13* B(M1)(W.u.)=0.93 *19*
		809.7 *2*	12 *4*	7846.2	(33/2$^-$)	(E2)	0.001551 *22*	α(K)=0.001355 *19*; α(L)=0.0001608 *23*; α(M)=2.98×10^{-5} *5* α(O)=2.42×10^{-7} *4*; α(N+..)=5.17×10^{-6} B(E2)(W.u.)=5.7 *22*
8875.3	(39/2$^+$)	1250.1 *2*	100	7625.1	(35/2$^+$)	(E2)	0.000596 *9*	α(K)=0.000509 *8*; α(L)=5.87×10^{-5} *9*; α(M)=1.086×10^{-5} *16*; α(N)=1.80×10^{-6} *3* α(O)=9.15×10^{-8} *13*; α(N+..)=1.717×10^{-5} *25* B(E2)(W.u.)>3.6
9346.6	(39/2$^-$)	690.5 *2*	100 *6*	8656.0	(37/2$^-$)	(M1)	0.00239 *4*	α(K)=0.00209 *3*; α(L)=0.000241 *4*; α(M)=4.48×10^{-5} *7*; α(N)=7.44×10^{-6} *11*; α(O)=3.84×10^{-7} *6* α(N+..)=7.83×10^{-6} *11* B(M1)(W.u.)>0.056
		951.7 *2*	19 *7*	8395.0	(35/2$^-$)	(E2)	0.001057 *15*	α(K)=0.000925 *13*; α(L)=0.0001084 *16*; α(M)=2.01×10^{-5} *3*

$^{95}_{45}Rh_{50}$-6

Adopted Levels, Gammas (continued)

γ(^{95}Rh) (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[†]	E_f	J_f^π	Mult.[#]	α	Comments
								α(O)=1.657×10^{-7} *24*; α(N+..)=3.49×10^{-6} B(E2)(W.u.)>4.5
10653.3	(41/2$^-$)	1306.7 *2*	100 *31*	9346.6	(39/2$^-$)			
		1997.3 *2*	43 *29*	8656.0	(37/2$^-$)			
11368.0		2021.4 *2*	100	9346.6	(39/2$^-$)			
11967.1?	(41/2$^+$)	3091.9 *2*	100	8875.3	(39/2$^+$)			
12113.9	(41/2$^+$)	3238.6 *2*	100	8875.3	(39/2$^+$)			
12194.7		2848.1 *2*	100	9346.6	(39/2$^-$)			
12434.6	(43/2$^+$)	467.6 *2*	1.0×10^2 *3*	11967.1?	(41/2$^+$)			
		3559.2 *2*	46 *11*	8875.3	(39/2$^+$)			
12869.1	(41/2$^-$,43/2$^-$)	3522.4 *2*	100	9346.6	(39/2$^-$)			
13876.4	(45/2$^+$,47/2$^+$)	1441.8 *2*	100	12434.6	(43/2$^+$)			

[†] From ^{95}Rh IT decay (18.8 ns) 1994Ro08, except as noted.

[‡] A common $T_{1/2}$=23 ps *6* has been reported for these γ′s in 1980No06 from RDDS measurement.

[#] From γ(θ) and cascading pattern of γ-decay (1994Ro08).

[@] Uncertainty from measured proton energies in 2003Ba39.

[&] From the Iγ(1004.95) and Iγ(168.84) one can obtain α=0.344. However, α(E1)=0.032 which indicates a possible problem with the E1 assignment. On the other hand α(E2)=0.21 but would have a large B(E2) (=8.5 *5* w.u) which may not commensurate with this magic nucleus as quoted in 1980No06. Also, the value of Iγ(169.0) may be low because of the half life of this state.

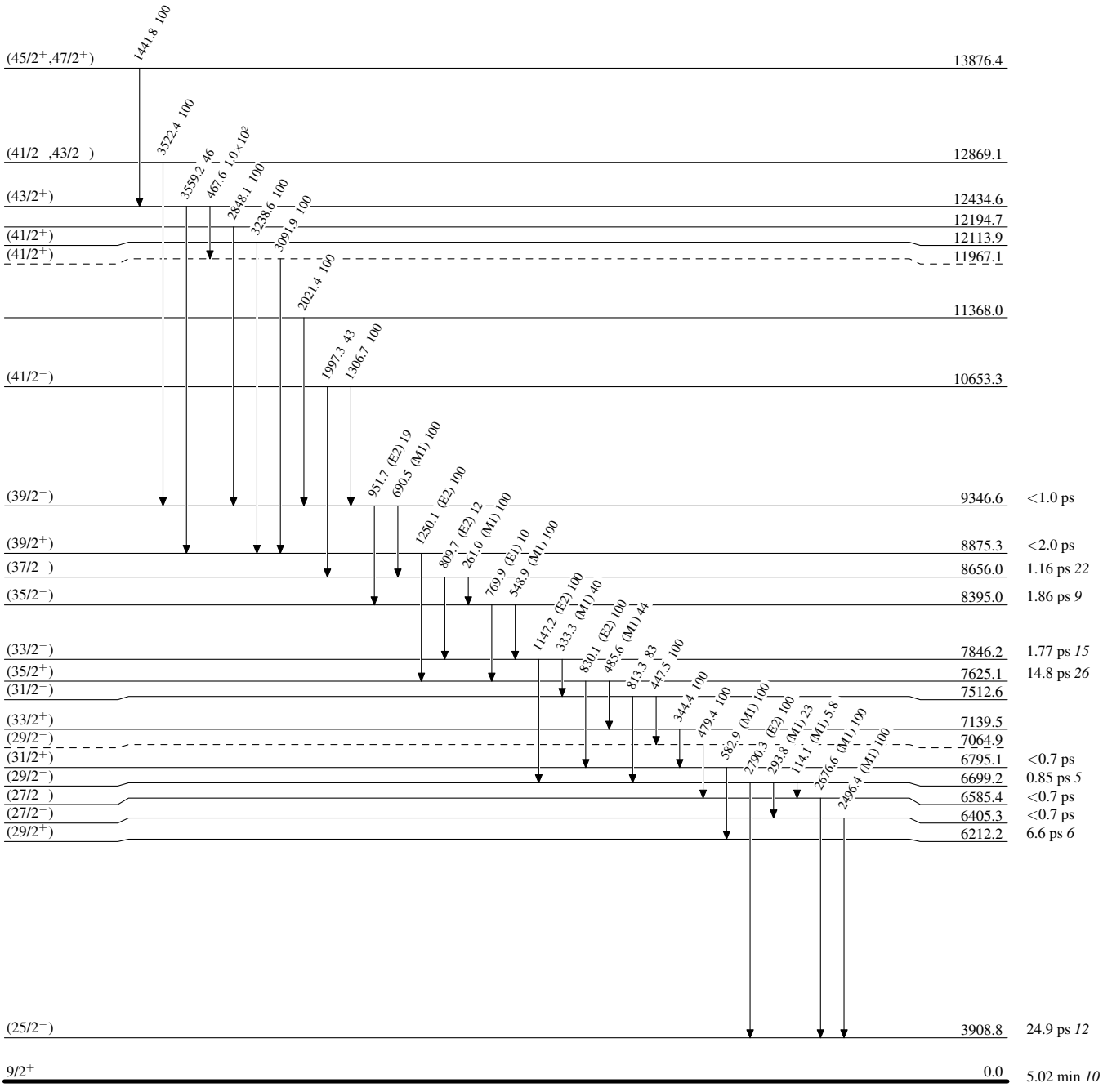
[a] Placement of transition in the level scheme is uncertain.

$^{95}_{45}Rh_{50}$-7

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level



$^{95}_{45}Rh_{50}$

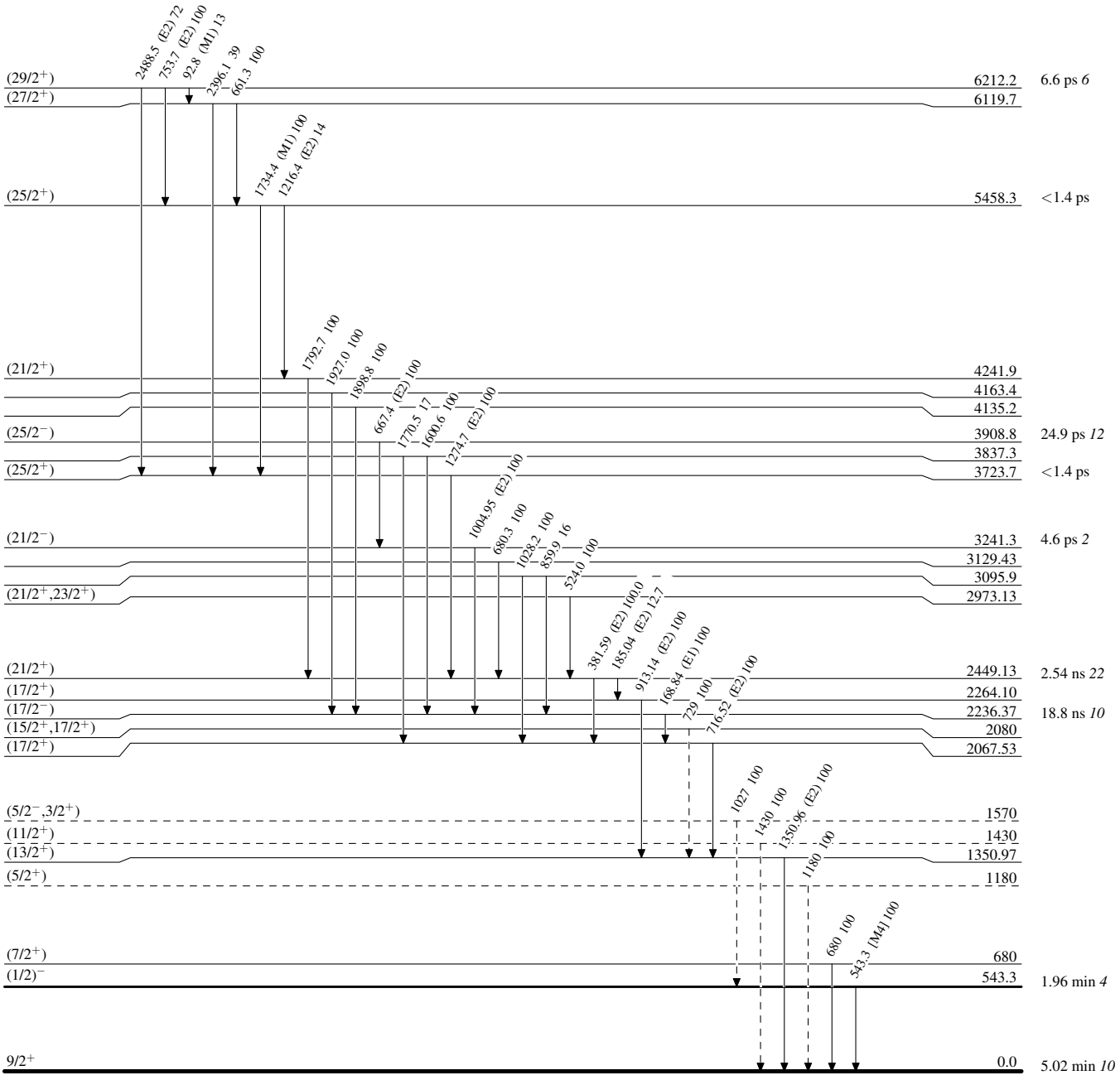
Adopted Levels, Gammas

Legend

Level Scheme (continued)

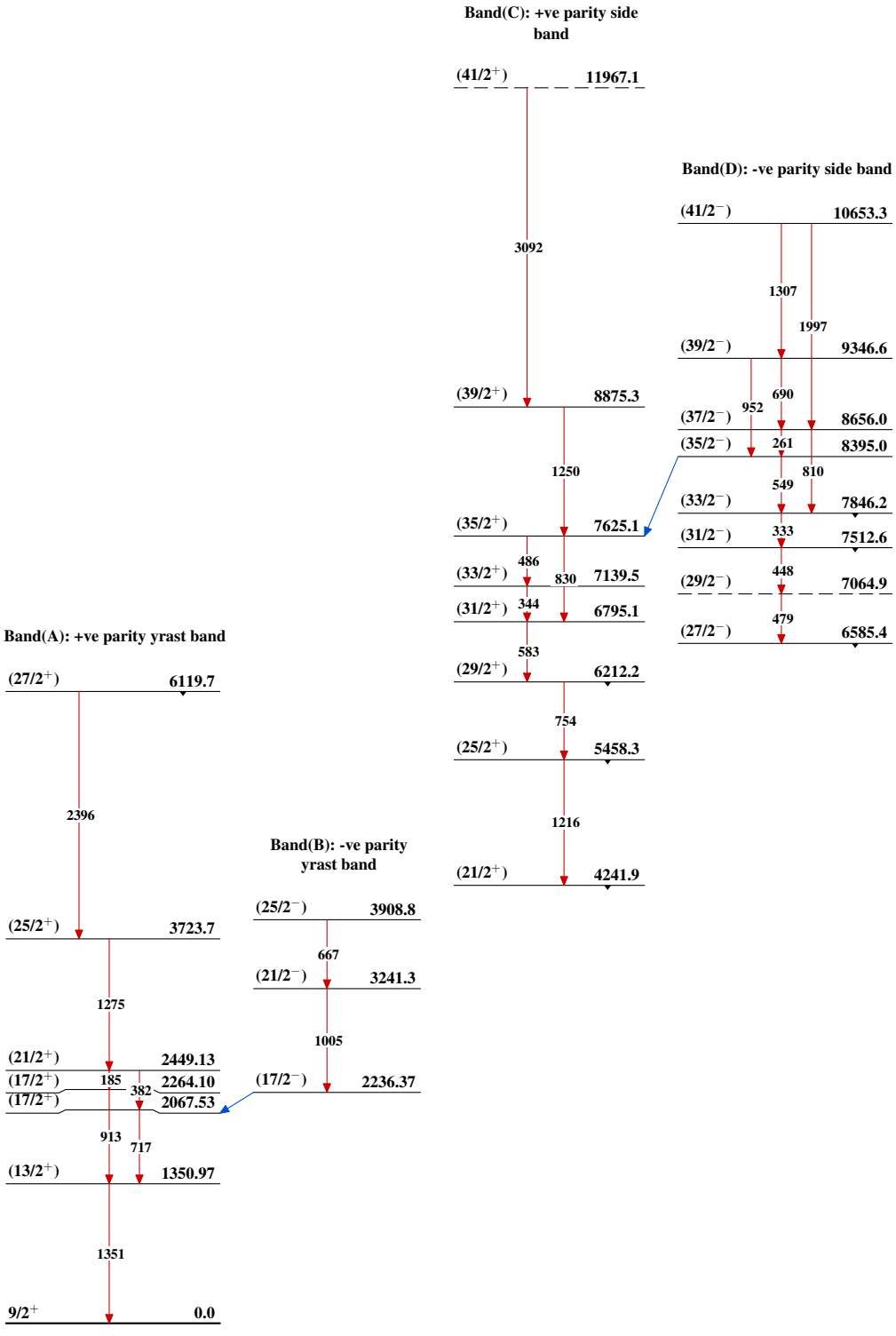
Intensities: Relative photon branching from each level

γ Decay (Uncertain)



$^{95}_{45}Rh_{50}$

Adopted Levels, Gammas



$^{95}_{45}Rh_{50}$