^{99}Pd ε decay 1969Ph01

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 145, 25 (2017)	1-Jul-2017

Parent: ^{99}Pd: E=0.0; J^π=(5/2)$^+$; $T_{1/2}$=21.4 min *2*; Q(ε)=3398 *8*; %ε+%β^+ decay=100.0
Measured: γ, β^+, $\beta\gamma$ (1969Ph01), γ, ce (1972Ga21). Other: 1970An01.
β singles and coincidence spectra measured by 1969Ph01.
ε feedings are from γ-ray transition intensity balances, unless indicated otherwise.
1972Ga21: Measured Ice. Ge(Li), magnetic spectrometer.

^{99}Rh Levels

E(level)	J^π †	$T_{1/2}$ †	E(level)	J^π †
0.0	(1/2$^-$)	16.1 d *2*	2051.5 *4*	(3/2,5/2,7/2)$^+$
64.2 *4*	9/2$^+$	4.7 h *1*	2070.6 *6*	
200.3 *4*	(7/2)$^+$		2143.1 *6*	(3/2,5/2,7/2)$^+$
427.33 *10*	(5/2$^-$)		2181.0 *4*	(3/2)$^+$
463.9 *4*	(5/2)$^+$		2198.7 *5*	(3/2,5/2,7/2)$^+$
850.7 *4*	(7/2)$^+$		2267.8 *5*	(3/2,5/2,7/2)$^+$
874.0 *4*	(5/2)$^+$		2343.0 *6*	(5/2,7/2)$^+$
1018.0 *4*	(7/2)		2388.1 *4*	(5/2,7/2)$^+$
1110.8 *4*	(5/2$^+$,7/2)		2617.8 *8*	(5/2,7/2)$^+$
1167.4 *4*	(5/2)$^+$		2639.8 *6*	(5/2,7/2)$^+$
1366.3 *4*	(5/2$^+$)		2709.4 *7*	(3/2,5/2,7/2)$^+$
1527.4 *3*	(3/2)$^+$		2736.6 *6*	(5/2,7/2)$^+$
1535.7 *4*	(5/2,7/2)$^+$		2758.6 *4*	(5/2,7/2)$^+$
1760.8 *4*	(5/2,7/2)$^+$		2835.8 *8*	(3/2,5/2,7/2)$^+$
1814.5 *7*	(3/2$^+$,5/2$^+$,7/2$^+$)		2860.0 *10*	(5/2,7/2)$^+$
1969.1 *5*	(5/2,7/2)$^+$		2957.2 *5*	(5/2,7/2)$^+$
2040.0 *4*			3047.0 *8*	(5/2,7/2)$^+$

† From Adopted Levels.

ε,β^+ radiations

E(decay)	E(level)	Iβ^+ †	Iε †	Log *ft*	I($\varepsilon+\beta^+$) †	Comments
(351 *8*)	3047.0		0.33 *9*	4.88 *12*	0.33 *9*	εK=0.8540; εL=0.1176 *3*; εM+=0.02836 *9*
(441 *8*)	2957.2		1.09 *24*	4.57 *10*	1.09 *24*	εK=0.8573; εL=0.11509 *18*; εM+=0.02766 *5*
(538 *8*)	2860.0		0.17 *6*	5.56 *16*	0.17 *6*	εK=0.8594; εL=0.11337 *12*; εM+=0.02719 *4*
(562 *8*)	2835.8		0.26 *7*	5.42 *12*	0.26 *7*	εK=0.8599; εL=0.1130; εM+=0.02710 *3*
(639 *8*)	2758.6		1.6 *4*	4.75 *11*	1.6 *4*	εK=0.8610; εL=0.1122; εM+=0.02685
(661 *8*)	2736.6		1.3 *3*	4.87 *10*	1.3 *3*	εK=0.8612; εL=0.1120; εM+=0.02680
(689 *8*)	2709.4		1.10 *23*	4.97 *10*	1.10 *23*	εK=0.8616; εL=0.1117; εM+=0.02673
(758 *8*)	2639.8		0.47 *11*	5.43 *11*	0.47 *11*	εK=0.8622; εL=0.1112; εM+=0.02658
(780 *8*)	2617.8		0.22 *7*	5.79 *14*	0.22 *7*	εK=0.8624; εL=0.1110; εM+=0.02654
(1010 *8*)	2388.1		2.0 *4*	5.06 *9*	2.0 *4*	εK=0.8639; εL=0.1099; εM+=0.02622
(1055 *8*)	2343.0		0.77 *17*	5.51 *10*	0.77 *17*	εK=0.8641; εL=0.1097; εM+=0.02618
(1130 *8*)	2267.8		0.97 *22*	5.47 *10*	0.97 *22*	εK=0.8644; εL=0.1095; εM+=0.02611
(1199 *8*)	2198.7		1.9 *4*	5.23 *10*	1.9 *4*	εK=0.8644; εL=0.1093; εM+=0.02605
(1217 *8*)	2181.0	0.0015 *4*	4.1 *8*	4.91 *9*	4.1 *8*	av Eβ=92 *4*; εK=0.8644; εL=0.1092; εM+=0.02603
(1255 *8*)	2143.1		1.12 *25*	5.50 *10*	1.12 *25*	εK=0.8641; εL=0.1091; εM+=0.02600
(1327‡ *8*)	2070.6	<0.0003	<0.10	>6.6	<0.1	av Eβ=140 *4*; εK=0.8629; εL=0.1087; εM+=0.02591
(1347 *8*)	2051.5	0.0037 *8*	1.15 *23*	5.56 *9*	1.15 *23*	av Eβ=148 *4*; εK=0.8623; εL=0.1086; εM+=0.02588
(1358‡ *8*)	2040.0	0.0001 *4*	0.04 *12*	7.0 *13*	0.04 *12*	av Eβ=153 *4*; εK=0.8619; εL=0.1085; εM+=0.02586

Continued on next page (footnotes at end of table)

^{99}Pd ε decay 1969Ph01 (continued)

ϵ,β^+ radiations (continued)

E(decay)	E(level)	Iβ^+ †	Iε†	Log *ft*	I$(\varepsilon+\beta^+)$†	Comments
(1429 *8*)	1969.1	0.0096 *25*	1.2 *3*	5.59 *11*	1.2 *3*	av Eβ=184 *4*; εK=0.8584; εL=0.1079; εM+=0.02571
(1584 *8*)	1814.5	0.018 *4*	0.64 *14*	5.95 *10*	0.66 *14*	av Eβ=251 *4*; εK=0.8421 *13*; εL=0.10557 *17*; εM+=0.02514 *4*
(1637 *8*)	1760.8	0.032 *8*	0.82 *19*	5.88 *11*	0.85 *20*	av Eβ=274 *4*; εK=0.8330 *16*; εL=0.10434 *21*; εM+=0.02485 *5*
(1862 *8*)	1535.7	0.56 *11*	4.6 *9*	5.23 *9*	5.2 *10*	av Eβ=372 *4*; εK=0.773 *3*; εL=0.0965 *4*; εM+=0.02298 *9*
(1871 *8*)	1527.4	0.13 *4*	1.1 *4*	5.88 *15*	1.2 *4*	av Eβ=375 *4*; εK=0.770 *3*; εL=0.0962 *4*; εM+=0.02289 *9*
(2032 *8*)	1366.3	0.11 *4*	0.47 *15*	6.30 *15*	0.58 *19*	av Eβ=446 *4*; εK=0.706 *4*; εL=0.0880 *5*; εM+=0.02095 *11*
(2231‡ *8*)	1167.4	0.2 *1*	0.4 *2*	6.43 *22*	0.6 *3*	av Eβ=534 *4*; εK=0.613 *4*; εL=0.0762 *5*; εM+=0.01813 *12*
(2287 *8*)	1110.8	0.27 *7*	0.55 *14*	6.34 *12*	0.82 *21*	av Eβ=559 *4*; εK=0.585 *4*; εL=0.0727 *5*; εM+=0.01730 *12*
(2380 *8*)	1018.0	0.29 *8*	0.48 *13*	6.44 *12*	0.77 *21*	av Eβ=600 *4*; εK=0.539 *4*; εL=0.0670 *5*; εM+=0.01593 *12*
(2524 *8*)	874.0	1.9 *5*	2.3 *5*	5.81 *11*	4.2 *10*	av Eβ=665 *4*; εK=0.470 *4*; εL=0.0584 *5*; εM+=0.01389 *11*
(2547 *8*)	850.7	3.2 *6*	3.6 *7*	5.62 *9*	6.8 *13*	av Eβ=675 *4*; εK=0.460 *4*; εL=0.0571 *5*; εM+=0.01357 *11*
(2934 *8*)	463.9	5.6 *12*	3.1 *6*	5.81 *9*	8.7 *18*	av Eβ=851 *4*; εK=0.308 *3*; εL=0.0382 *4*; εM+=0.00907 *8*
(2971 *8*)	427.33	0.44 *15*	0.23 *8*	6.95 *15*	0.67 *23*	av Eβ=868 *4*; εK=0.296 *3*; εL=0.0367 *4*; εM+=0.00873 *8*
(3198 *8*)	200.3	36 *7*	13 *2*	5.26 *8*	49 *9*	av Eβ=972 *4*; εK=0.2336 *20*; εL=0.02891 *25*; εM+=0.00687 *6*

† Absolute intensity per 100 decays.

‡ Existence of this branch is questionable.

γ(^{99}Rh)

Iγ normalization: Deduced by evaluators assuming no β^+ feeding to g.s. (1/2$^-$) based on log *ft* systematics (Iβ(g.s.)=0.37 *37* as deduced from log $f^{1u}t$>8.5), and also no β^+ feeding to the 64-keV (9/2$^+$) level. Σ (I(γ+ce)) to g.s. and 1st excited state=100.

Additional information 1.

E$_\gamma$	I$_\gamma$[@]	E$_i$(level)	J$^\pi_i$	E$_f$	J$^\pi_f$	Mult.[†]	δ[†#]	α[‡]	Comments
136.0 *1*	100	200.3	(7/2)$^+$	64.2	9/2$^+$	M1(+E2)	0.2 *2*	0.16 *8*	%Iγ=73 *5* α(K)=0.136 *24*; α(L)=0.0174 *52*; α(M)=0.00325 *98* α(N)=5.3×10^{-4} *15*; α(O)=2.5×10^{-5} *4*
236.0 *10*	0.23 *4*	1110.8	(5/2$^+$,7/2)	874.0	(5/2)$^+$				%Iγ=0.17 *5*
263.6 *1*	20.9 *10*	463.9	(5/2)$^+$	200.3	(7/2)$^+$	M1(+E2)	0.4 *4*	0.028 *5*	%Iγ=15 *3* α(K)=0.024 *4*; α(L)=0.0030 *7*; α(M)=0.00055 *13* α(N)=9.1×10^{-5} *20*; α(O)=4.4×10^{-6} *6*
293.3 *4*	1.8 *3*	1167.4	(5/2)$^+$	874.0	(5/2)$^+$	[M1,E2]		0.025 *6*	%Iγ=1.3 *4* α(K)=0.021 *5*; α(L)=0.00278 *81*; α(M)=5.2×10^{-4} *16* α(N)=8.5×10^{-5} *24*; α(O)=3.7×10^{-6} *7* Mult.: (E1) from α(K)exp in conflict with adopted π which requires no parity change.
368.0 *3*	0.20 *3*	1535.7	(5/2,7/2)$^+$	1167.4	(5/2)$^+$	E2(+M3)	0.1 *1*	0.016 *4*	%Iγ=0.15 *4* α(K)=0.014 *4*; α(L)=0.00181 *49*; α(M)=3.37×10^{-4} *93* α(N)=5.5×10^{-5} *16*; α(O)=2.38×10^{-6} *70* α(K)exp=0.016 *2*. Uncertainty not given by the author but assumed by the evaluators for deducing δ.
386.7 *1*	3.90 *35*	850.7	(7/2)$^+$	463.9	(5/2)$^+$	M1(+E2)	1.0 *10*	0.0109 *15*	%Iγ=2.9 *6* α(K)=0.0095 *12*; α(L)=0.00118 *21*; α(M)=0.00022 *4* α(N)=3.6×10^{-5} *6*; α(O)=1.69×10^{-6} *15*
399.8 *1*	4.9 *3*	463.9	(5/2)$^+$	64.2	9/2$^+$	E2(+M3)	0.06 *6*	0.0115 *11*	%Iγ=3.6 *7* α(K)=0.0099 *9*; α(L)=0.00129 *14*; α(M)=0.000240 *25* α(N)=3.9×10^{-5} *4*; α(O)=1.72×10^{-6} *19*
410.3 *2*	1.8 *1*	874.0	(5/2)$^+$	463.9	(5/2)$^+$	M1		0.00824	%Iγ=1.32 *25* α(K)=0.00721 *11*; α(L)=0.000844 *12*; α(M)=0.0001568 *22* α(N)=2.60×10^{-5} *4*; α(O)=1.331×10^{-6} *19*
427.3 *1*	2.70 *15*	427.33	(5/2$^-$)	0.0	(1/2$^-$)	E2(+M3)	0.07 *10*	0.0094 *18*	%Iγ=2.0 *4* α(K)=0.0081 *15*; α(L)=0.00105 *22*; α(M)=0.00020 *5* α(N)=3.2×10^{-5} *7*; α(O)=1.4×10^{-6} *4*
524.1 *2*	0.46 *7*	2051.5	(3/2,5/2,7/2)$^+$	1527.4	(3/2)$^+$				%Iγ=0.34 *8*
627.0 *4*	0.39 *9*	2388.1	(5/2,7/2)$^+$	1760.8	(5/2,7/2)$^+$				%Iγ=0.29 *9*
646.1 *7*	0.81 *6*	1110.8	(5/2$^+$,7/2)	463.9	(5/2)$^+$				%Iγ=0.59 *12*
650.4 *5*	1.8 *2*	850.7	(7/2)$^+$	200.3	(7/2)$^+$	(M1,E2)		0.00273	%Iγ=1.3 *3* α(K)=0.00238 *4*; α(L)=0.000282 *6*; α(M)=5.24×10^{-5} *12* α(N)=8.66×10^{-6} *16*; α(O)=4.30×10^{-7} *13*

γ(^{99}Rh) (continued)

E_γ	I_γ @	E_i(level)	J_i^π	E_f	J_f^π	Mult.†	α‡	Comments
652.8 *5*	2.0 *2*	2181.0	$(3/2)^+$	1527.4	$(3/2)^+$			%Iγ=1.5 *3*
653.1 *3*	3.5 *2*	1527.4	$(3/2)^+$	874.0	$(5/2)^+$			%Iγ=2.6 *5*
662.4 *4*	0.53 *9*	2198.7	$(3/2,5/2,7/2)^+$	1535.7	$(5/2,7/2)^+$			%Iγ=0.39 *10*
673.4 *2*	9.5 *7*	874.0	$(5/2)^+$	200.3	$(7/2)^+$	M1,E2	0.00250 *5*	%Iγ=7.0 *14* α(K)=0.00219 *5*; α(L)=0.000258 *5*; α(M)=4.79×10^{-5} *9* α(N)=7.93×10^{-6} *12*; α(O)=3.95×10^{-7} *13*
684.8 *4*	0.18 *3*	1535.7	$(5/2,7/2)^+$	850.7	$(7/2)^+$			%Iγ=0.13 *4*
684.8 *4*	0.18 *3*	2051.5	$(3/2,5/2,7/2)^+$	1366.3	$(5/2^+)$			%Iγ=0.13 *4*
702.7 *3*	0.33 *4*	1167.4	$(5/2)^+$	463.9	$(5/2)^+$			%Iγ=0.24 *6*
718.7 *2*	0.59 *6*	2758.6	$(5/2,7/2)^+$	2040.0				%Iγ=0.43 *9*
740.0 *10*	0.23 *4*	1167.4	$(5/2)^+$	427.33	$(5/2^-)$			%Iγ=0.17 *5*
758.5 *4*	0.22 *4*	2957.2	$(5/2,7/2)^+$	2198.7	$(3/2,5/2,7/2)^+$			%Iγ=0.16 *5*
767.2 *5*	0.30 *6*	2736.6	$(5/2,7/2)^+$	1969.1	$(5/2,7/2)^+$			%Iγ=0.22 *6*
786.6 *2*	4.6 *2*	850.7	$(7/2)^+$	64.2	$9/2^+$	M1,E2	0.00172 *6*	%Iγ=3.4 *7* α(K)=0.00150 *6*; α(L)=0.000176 *4*; α(M)=3.26×10^{-5} *7* α(N)=5.41×10^{-6} *13*; α(O)=2.72×10^{-7} *14*
809.8 *2*	2.8 *2*	874.0	$(5/2)^+$	64.2	$9/2^+$			%Iγ=2.0 *4*
817.6 *2*	1.5 *1*	1018.0	(7/2)	200.3	$(7/2)^+$			%Iγ=1.10 *21*
852.3 *2*	0.42 *8*	2388.1	$(5/2,7/2)^+$	1535.7	$(5/2,7/2)^+$			%Iγ=0.31 *8*
886.5& *3*	0.46& *8*	1760.8	$(5/2,7/2)^+$	874.0	$(5/2)^+$			%Iγ=0.34 *9*
886.5& *3*	0.46& *8*	2957.2	$(5/2,7/2)^+$	2070.6				%Iγ=0.34 *9*
910.9 *3*	0.39 *9*	1110.8	$(5/2^+,7/2)$	200.3	$(7/2)^+$			%Iγ=0.29 *9*
954.0 *5*	0.24 *9*	1018.0	(7/2)	64.2	$9/2^+$			%Iγ=0.18 *8*
967.1 *2*	1.3 *1*	1167.4	$(5/2)^+$	200.3	$(7/2)^+$			%Iγ=0.95 *19*
1013.4 *3*	2.0 *2*	2181.0	$(3/2)^+$	1167.4	$(5/2)^+$			%Iγ=1.5 *3*
1022.1 *3*	0.38 *13*	2040.0		1018.0	(7/2)			%Iγ=0.28 *11*
1046.5 *3*	0.60 *6*	1110.8	$(5/2^+,7/2)$	64.2	$9/2^+$			%Iγ=0.44 *9*
1063.8 *10*	0.10 *4*	1527.4	$(3/2)^+$	463.9	$(5/2)^+$			%Iγ=0.07 *4*
1071.7 *3*	1.22 *9*	1535.7	$(5/2,7/2)^+$	463.9	$(5/2)^+$			%Iγ=0.89 *18*
1095.1 *6*	0.33 *10*	1969.1	$(5/2,7/2)^+$	874.0	$(5/2)^+$			%Iγ=0.24 *9*
1099.6 *4*	1.4 *2*	1527.4	$(3/2)^+$	427.33	$(5/2^-)$			%Iγ=1.02 *24*
1124.4 *5*	0.31 *8*	2143.1	$(3/2,5/2,7/2)^+$	1018.0	(7/2)			%Iγ=0.23 *8*
1157.2 *4*	0.91 *15*	2267.8	$(3/2,5/2,7/2)^+$	1110.8	$(5/2^+,7/2)$			%Iγ=0.67 *17*
1165.6 *4*	1.03 *15*	1366.3	$(5/2^+)$	200.3	$(7/2)^+$			%Iγ=0.75 *18*
1201.1 *8*	0.15 *6*	2051.5	$(3/2,5/2,7/2)^+$	850.7	$(7/2)^+$			%Iγ=0.11 *5*
1219.5 *7*	0.41 *10*	2070.6		850.7	$(7/2)^+$			%Iγ=0.30 *9*
1231.0 *4*	1.0 *1*	2758.6	$(5/2,7/2)^+$	1527.4	$(3/2)^+$			%Iγ=0.73 *15*
1274.2 *8*	0.19 *6*	2639.8	$(5/2,7/2)^+$	1366.3	$(5/2^+)$			%Iγ=0.14 *5*
1298.0 *8*	0.11 *5*	1760.8	$(5/2,7/2)^+$	463.9	$(5/2)^+$			%Iγ=0.08 *4*
1302.2 *7*	0.32 *10*	1366.3	$(5/2^+)$	64.2	$9/2^+$			%Iγ=0.23 *9*
1325.0 *5*	1.15 *15*	2198.7	$(3/2,5/2,7/2)^+$	874.0	$(5/2)^+$			%Iγ=0.84 *19*
1335.6 *4*	6.4 *3*	1535.7	$(5/2,7/2)^+$	200.3	$(7/2)^+$			%Iγ=4.7 *9*

γ(^{99}Rh) (continued)

E_γ	I_γ[@]	E_i(level)	J^π_i	E_f	J^π_f	Comments
1350.9 *10*	0.24 *6*	1814.5	$(3/2^+,5/2^+,7/2^+)$	463.9	$(5/2)^+$	%Iγ=0.18 *6*
1391.6[&] *10*	0.18[&] *8*	2267.8	$(3/2,5/2,7/2)^+$	874.0	$(5/2)^+$	%Iγ=0.13 *7*
1391.6[&] *10*	0.18[&] *8*	2758.6	$(5/2,7/2)^+$	1366.3	$(5/2^+)$	%Iγ=0.13 *7*
1422.2 *10*	0.22 *10*	2957.2	$(5/2,7/2)^+$	1535.7	$(5/2,7/2)^+$	%Iγ=0.16 *8*
1429.4 *10*	0.27 *10*	2957.2	$(5/2,7/2)^+$	1527.4	$(3/2)^+$	%Iγ=0.20 *9*
1471.2 *9*	0.31 *9*	1535.7	$(5/2,7/2)^+$	64.2	$9/2^+$	%Iγ=0.23 *8*
1504.8 *5*	0.74 *9*	1969.1	$(5/2,7/2)^+$	463.9	$(5/2)^+$	%Iγ=0.54 *12*
1515.1 *8*	0.27 *9*	2388.1	$(5/2,7/2)^+$	874.0	$(5/2)^+$	%Iγ=0.20 *8*
1528.1 *6*	0.39 *7*	1527.4	$(3/2)^+$	0.0	$(1/2^-)$	%Iγ=0.29 *8*
1540.8 *10*	0.21 *6*	2709.4	$(3/2,5/2,7/2)^+$	1167.4	$(5/2)^+$	%Iγ=0.15 *6*
1559.6 *6*	0.22 *5*	1760.8	$(5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.16 *5*
1587.6 *6*	0.17 *4*	2051.5	$(3/2,5/2,7/2)^+$	463.9	$(5/2)^+$	%Iγ=0.12 *4*
1614.1 *6*	0.66 *8*	1814.5	$(3/2^+,5/2^+,7/2^+)$	200.3	$(7/2)^+$	%Iγ=0.48 *11*
1680.5 *9*	0.85 *15*	2143.1	$(3/2,5/2,7/2)^+$	463.9	$(5/2)^+$	%Iγ=0.62 *16*
1697.3 *6*	0.76 *10*	1760.8	$(5/2,7/2)^+$	64.2	$9/2^+$	%Iγ=0.56 *13*
1717.6 *5*	0.88 *9*	2181.0	$(3/2)^+$	463.9	$(5/2)^+$	%Iγ=0.64 *14*
1735.0 *8*	0.13 *6*	2198.7	$(3/2,5/2,7/2)^+$	463.9	$(5/2)^+$	%Iγ=0.10 *5*
1754.1 *10*	0.18 *8*	2181.0	$(3/2)^+$	427.33	$(5/2^-)$	%Iγ=0.13 *7*
1789.6 *10*	0.29 *6*	2639.8	$(5/2,7/2)^+$	850.7	$(7/2)^+$	%Iγ=0.21 *6*
1789.6 *10*	0.29 *6*	2957.2	$(5/2,7/2)^+$	1167.4	$(5/2)^+$	%Iγ=0.21 *6*
1804.2 *8*	0.24 *8*	2267.8	$(3/2,5/2,7/2)^+$	463.9	$(5/2)^+$	%Iγ=0.18 *7*
1840.0 *8*	0.26 *7*	2040.0		200.3	$(7/2)^+$	%Iγ=0.19 *7*
1851.6 *8*	0.62 *9*	2051.5	$(3/2,5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.45 *11*
1863.6 *8*	0.25 *6*	2736.6	$(5/2,7/2)^+$	874.0	$(5/2)^+$	%Iγ=0.18 *6*
1879.6[&] *8*	0.23[&] *6*	2343.0	$(5/2,7/2)^+$	463.9	$(5/2)^+$	%Iγ=0.17 *6*
1879.6[&] *8*	0.23[&] *6*	3047.0	$(5/2,7/2)^+$	1167.4	$(5/2)^+$	%Iγ=0.17 *6*
1904.7 *5*	0.90 *15*	1969.1	$(5/2,7/2)^+$	64.2	$9/2^+$	%Iγ=0.66 *16*
1924.8 *6*	0.65 *10*	2388.1	$(5/2,7/2)^+$	463.9	$(5/2)^+$	%Iγ=0.48 *12*
1943.4 *7*	0.37 *9*	2143.1	$(3/2,5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.27 *9*
1962.0 *10*	0.11 *4*	2835.8	$(3/2,5/2,7/2)^+$	874.0	$(5/2)^+$	%Iγ=0.08 *4*
1982.5 *10*	0.08 *3*	2181.0	$(3/2)^+$	200.3	$(7/2)^+$	%Iγ=0.059 *25*
1999.1 *5*	1.06 *10*	2198.7	$(3/2,5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.78 *16*
2142.4 *7*	0.57 *8*	2343.0	$(5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.42 *10*
2154.5 *8*	0.23 *6*	2617.8	$(5/2,7/2)^+$	463.9	$(5/2)^+$	%Iγ=0.17 *6*
2182.0 *13*	0.41 *9*	2181.0	$(3/2)^+$	0.0	$(1/2^-)$	%Iγ=0.30 *9*
2188.4 *15*	0.28 *8*	2388.1	$(5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.20 *7*
2246.2 *7*	1.14 *12*	2709.4	$(3/2,5/2,7/2)^+$	463.9	$(5/2)^+$	%Iγ=0.83 *18*
2273.3 *15*	0.48 *15*	2736.6	$(5/2,7/2)^+$	463.9	$(5/2)^+$	%Iγ=0.35 *13*
2278.2 *15*	0.26 *7*	2343.0	$(5/2,7/2)^+$	64.2	$9/2^+$	%Iγ=0.19 *7*
2324.6 *8*	0.75 *9*	2388.1	$(5/2,7/2)^+$	64.2	$9/2^+$	%Iγ=0.55 *12*
2373.1 *11*	0.11 *3*	2835.8	$(3/2,5/2,7/2)^+$	463.9	$(5/2)^+$	%Iγ=0.08 *3*
2394.0 *15*	0.06 *2*	2860.0	$(5/2,7/2)^+$	463.9	$(5/2)^+$	%Iγ=0.044 *17*

^{99}Pd ε decay 1969Ph01 (continued)

$\gamma(^{99}$Rh) (continued)

E_γ	I_γ [@]	E_i(level)	J_i^π	E_f	J_f^π	Comments
2417.6 *15*	0.035 *15*	2617.8	$(5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.026 *12*
2439.1 *12*	0.12 *3*	2639.8	$(5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.09 *3*
2492.7 *20*	0.03 *1*	2957.2	$(5/2,7/2)^+$	463.9	$(5/2)^+$	%Iγ=0.022 *9*
2508.7 *12*	0.16 *4*	2709.4	$(3/2,5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.12 *4*
2536.3 *9*	0.80 *15*	2736.6	$(5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.59 *16*
2550.8 *15*	0.04 *2*	2617.8	$(5/2,7/2)^+$	64.2	$9/2^+$	%Iγ=0.029 *16*
2557.8 *12*	0.26 *8*	2758.6	$(5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.19 *7*
2574.5 *9*	0.04 *1*	2639.8	$(5/2,7/2)^+$	64.2	$9/2^+$	%Iγ=0.029 *9*
2633.6 *12*	0.13 *3*	2835.8	$(3/2,5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.10 *3*
2661.4 *15*	0.056 *10*	2860.0	$(5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.041 *11*
2671.2 *15*	0.014 *10*	2736.6	$(5/2,7/2)^+$	64.2	$9/2^+$	%Iγ=0.010 *8*
2694.9 *10*	0.19 *4*	2758.6	$(5/2,7/2)^+$	64.2	$9/2^+$	%Iγ=0.14 *4*
2796.0 *15*	0.12 *3*	2860.0	$(5/2,7/2)^+$	64.2	$9/2^+$	%Iγ=0.09 *3*
2847.3 *15*	0.21 *6*	3047.0	$(5/2,7/2)^+$	200.3	$(7/2)^+$	%Iγ=0.15 *6*
2893.0 *20*	0.007 *3*	2957.2	$(5/2,7/2)^+$	64.2	$9/2^+$	%Iγ=0.0051 *24*
2982.0 *20*	0.014 *6*	3047.0	$(5/2,7/2)^+$	64.2	$9/2^+$	%Iγ=0.010 *5*

[†] From 1972Ga21; α(K)exp normalized to α(K)exp(212-keV γ in ^{121}Te)=0.0842 *14*.
[‡] Additional information 2.
[#] If No value given it was assumed δ=1.00 for E2/M1, δ=1.00 for E3/M2 and δ=0.10 for the other multipolarities.
[@] For absolute intensity per 100 decays, multiply by 0.73 *14*.
[&] Multiply placed with undivided intensity.

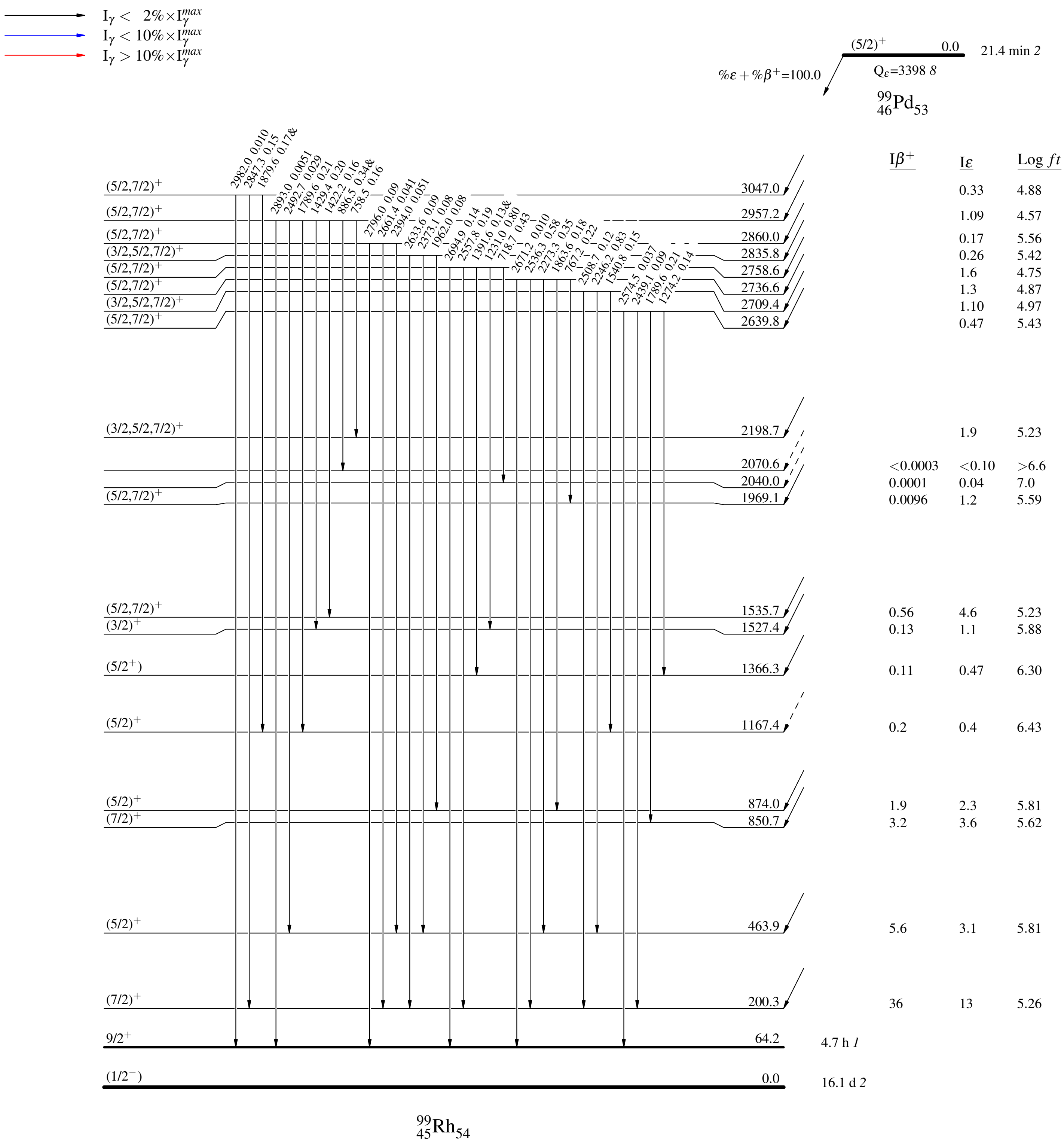
$^{99}_{45}Rh_{54}$-6

^{99}Pd ε decay 1969Ph01

Decay Scheme

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given

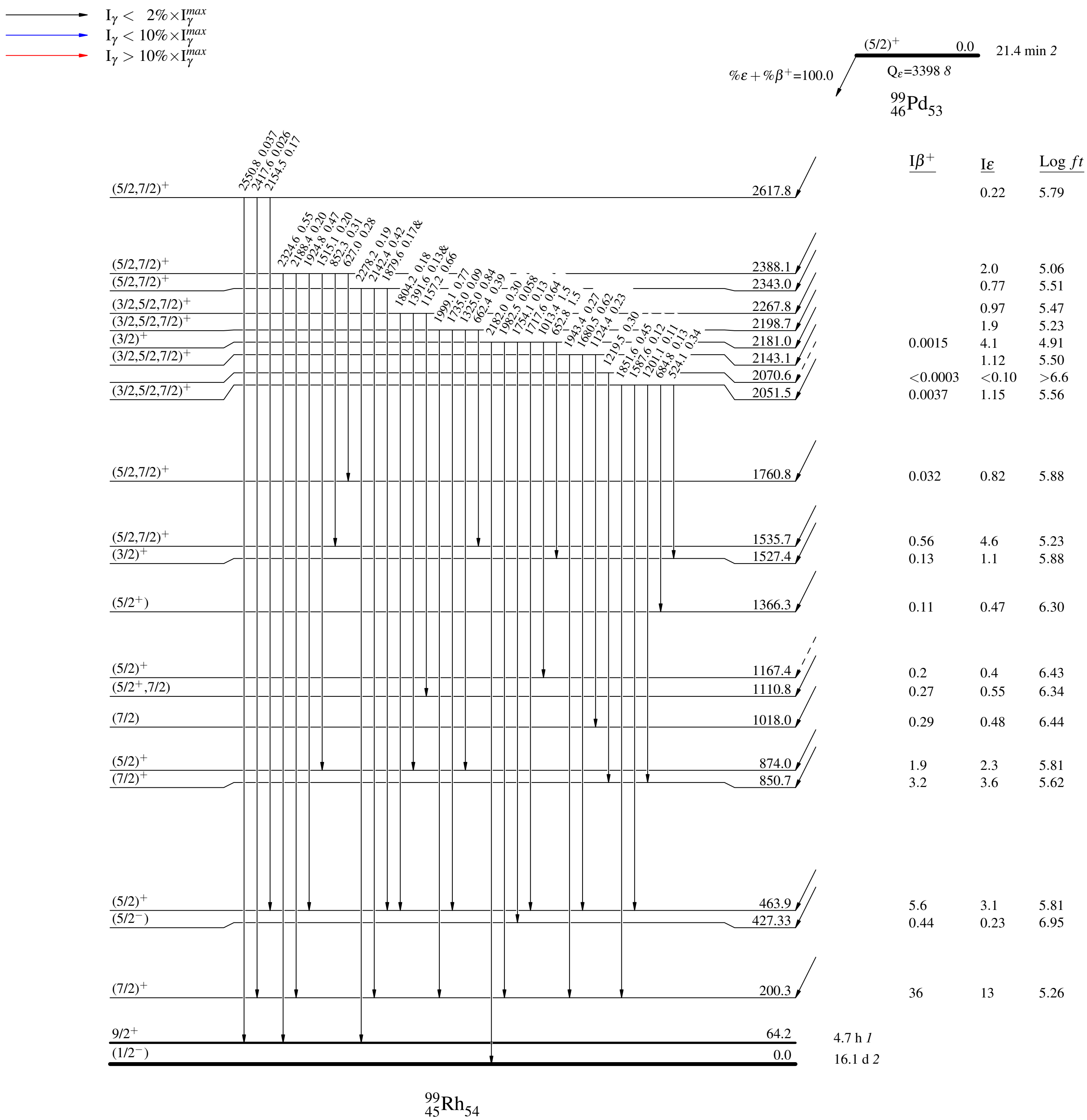
Legend



^{99}Pd ε decay 1969Ph01

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given

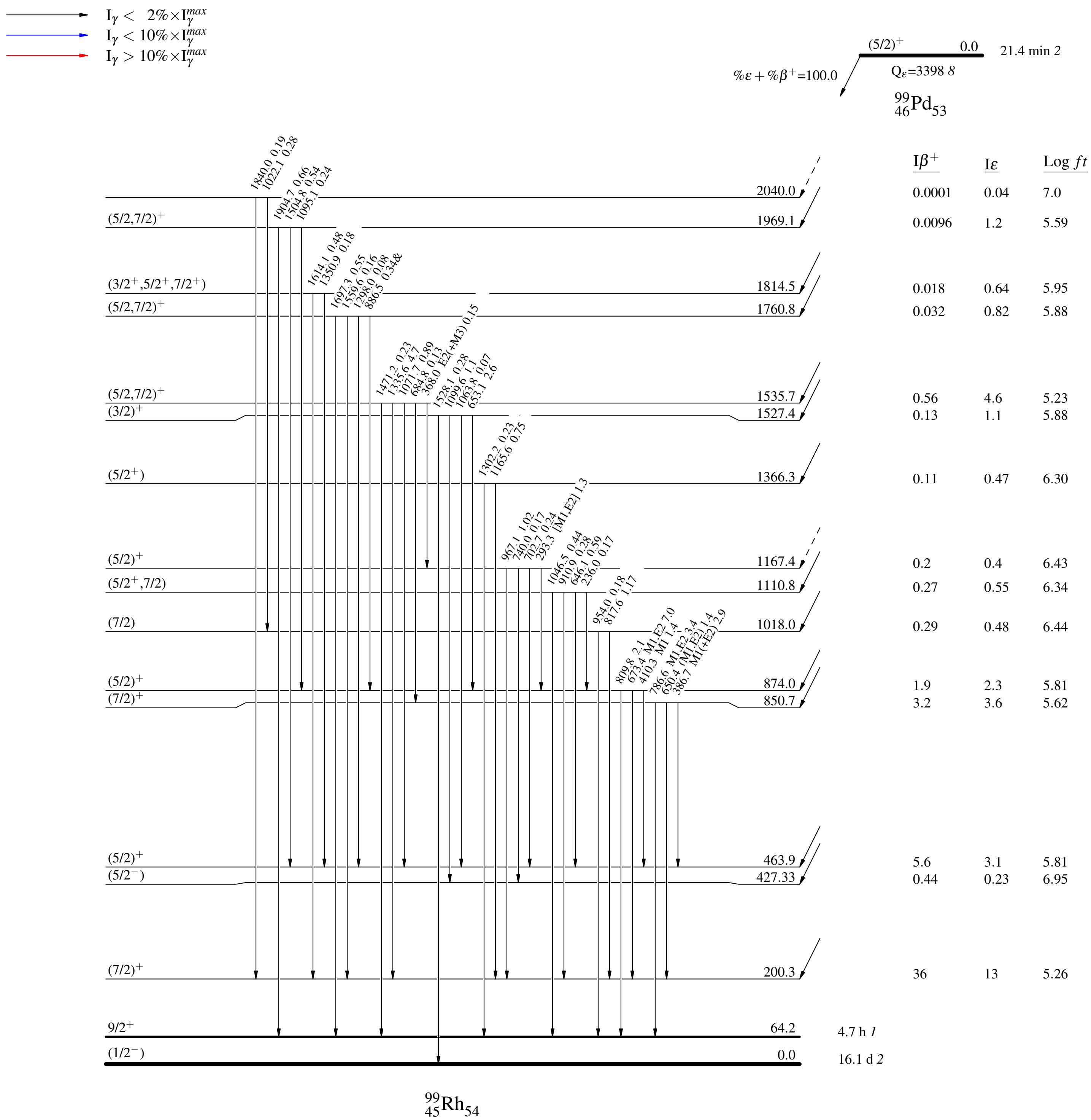


^{99}Pd ε decay 1969Ph01

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays
& Multiply placed: undivided intensity given

Legend



^{99}Pd ε decay 1969Ph01

Decay Scheme (continued)

Intensities: $I_{(\gamma+ce)}$ per 100 parent decays

& Multiply placed: undivided intensity given