

⁷⁶Rb $\epsilon+\beta^+$ decay (36.5 s) 2005Gi17,1985Pi08,1984Mo22

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Balraj Singh, Jun Chen and Ameenah R. Farhan		NDS 194,3 (2024)	8-Jan-2024

Parent: ⁷⁶Rb: E=0.0; J^π=1⁻; T_{1/2}=36.5 s 6; Q($\epsilon+\beta^+$)=8535 4; % $\epsilon+\beta^+$ decay=100

⁷⁶Rb-J^π,T_{1/2}: From ⁷⁶Rb Adopted Levels.

⁷⁶Rb-Q($\epsilon+\beta^+$): From 2021Wa16. Measured Q(ϵ)=8250 150 (1993Al03), 8094 162 (1983Li11), 8063 44 (1982Mo10).

2005Gi17: ⁷⁶Rb isotope produced in spallation reaction on a Nb target with a 1 GeV proton beam at ISOLDE isotopic mass separator. Measured E γ , I γ , $\gamma\gamma$, $\beta\gamma\gamma$ coin, lifetimes by $\beta\gamma\gamma(t)$, ce. Deduced levels, J, π , conversion coefficients, multipolarities, γ branching ratios.

1984Mo22 (also 1982Mo10): measured E γ , I γ , $\gamma\gamma$ - and $\beta^+\gamma$ -coin, mass-separated source.

1985Pi08: measured E γ , I γ , $\gamma\gamma$ -coin.

Others:

2013Pe13: Gamow-Teller strength distributions B(GT) deduced from total absorption spectrometer (TAS) system. ⁷⁶Rb nuclei produced from ϵ decay of ⁷⁶Sr and by spallation reaction Nb(p,X), E(p)=1.4 GeV proton beam from PS Booster on Nb target of 52 g/cm² at ISOLDE-CERN facility. The reaction products from the spallation were ionized in a surface ionization source, separated by HRS and GPS separators at ISOLDE, then implanted onto a 55 μ m thick aluminized mylar tape to be inserted into the spectrometer. Measured γ radiation in singles and coincidence modes using the total absorption spectrometer (TAS) Lucrecia consisting of a 38 cm x 38 cm cylindrical single NaI(Tl) crystal covering a solid angle of $\approx 4\pi$, with a transverse hole of 7.5 cm diameter for placement of additional detectors; a β scintillation counter, and a Ge telescope for detection of x rays and γ rays in coincidence modes. Deduced $\epsilon+\beta^+$ feedings, pseudo-levels, Gamow-Teller strength distributions. Comparison with quasiparticle random-phase approximation calculations.

γ , $\gamma\gamma$ -coin: 1975Bo52, 1975We23.

$\gamma\gamma(\theta)$: 1978LiZU.

$\beta^+\gamma$ -coin: 1983Li11, 1976DaYR, 1975We23.

Q(ϵ): 1993Al03 (by total γ absorption), 1983Li11 ($\beta^+\gamma$ -coin), 1982Mo10 (β^+).

⁷⁶Rb production and T_{1/2}(⁷⁶Rb): 1993Al03, 1979No07, 1979Lu07, 1979De43, 1975Ra03, 1975Bo52, 1974DeXQ, 1972Ve02, 1969Ch18.

⁷⁶Kr Levels

E(level) [†]	J ^π &	T _{1/2} [@]	Comments
0.0	0 ⁺		
424.05 7	2 ⁺		
769.94 9	0 ⁺	42 ps 6	J ^π : from (346 γ)(424 γ)(θ) (1978LiZU).
1034.75 9	4 ⁺		
1221.72 7	2 ⁺		
1598.07 8	(0) ⁺	<4.7 ps	
1687.32 8	2 ⁺	0.326 ps 35	
1733.26 10	3 ⁺		
2091.49 10	(2) ⁺	<34 ps	
2104.33 9	1 ⁻	16 ps 5	
2140.16 [‡] 16	(1,2) ⁺		
2192.50 [‡] 12			
2227.28 9	2 ⁻	25 ps 6	
2257.54 9	3 ⁻	<5.7 ps	
2332.70 [‡] 16	(1 ⁻)		
2571.01 8	1 ⁻	16 ps 4	
2581.11 [‡] 10	(2 ⁺)		
2700.16 [‡] 13	2 ⁺	<27 ps	
2742.27 [‡] 22	(4 ⁻)		
2774.94 12	0 ⁺ ,1,2	22 ps 10	
2816.57 18	(1,2) ⁺	<13 ps	

Continued on next page (footnotes at end of table)

^{76}Rb $\varepsilon+\beta^+$ decay (36.5 s) 2005Gi17,1985Pi08,1984Mo22 (continued) ^{76}Kr Levels (continued)

<u>E(level)[†]</u>	<u>J^{π&}</u>	<u>T_{1/2}[@]</u>	<u>E(level)[†]</u>	<u>E(level)[†]</u>		
2926.59	12	0 ⁻ ,1 ⁻ ,2 ⁻	21 ps	5	4700 [#] 20	6140 [#] 20
2970.1 [‡]	3	(0 ⁺ ,1,2)	<39 ps		4740 [#] 20	6180 [#] 20
3024.42	9	(2) ⁻	18 ps	6	4780 [#] 20	6220 [#] 20
3242.1 [‡]	3	(1,2 ⁺)	<23 ps		4820 [#] 20	6260 [#] 20
3275.91 [‡]	21	(1 ⁺ ,2)			4860 [#] 20	7340 [#] 20
3421.6 [‡]	5	(0 ⁺ ,1,2)	<24 ps		4900 [#] 20	7380 [#] 20
3456.1 [‡]	5	(0 ⁻ ,1,2)			4940 [#] 20	7420 [#] 20
3602.81 [‡]	13	1 ⁻	<9.7 ps		4980 [#] 20	7460 [#] 20
3636.3 [‡]	3	1,2 ⁽⁺⁾			5020 [#] 20	7500 [#] 20
3672.24 [‡]	22	(0,1,2)			5060 [#] 20	7540 [#] 20
3700 [#]	20				5100 [#] 20	7580 [#] 20
3740 [#]	20				5140 [#] 20	7620 [#] 20
3780 [#]	20				5180 [#] 20	7660 [#] 20
3820 [#]	20				5220 [#] 20	7700 [#] 20
3860 [#]	20				5260 [#] 20	7740 [#] 20
3900 [#]	20				5300 [#] 20	7780 [#] 20
3940 [#]	20				5340 [#] 20	7820 [#] 20
3978.0 [‡]	3	1,2 ⁽⁺⁾	<17 ps		5380 [#] 20	7860 [#] 20
3986.6 [‡]	3	1,2 ⁽⁺⁾	27 ps	18	5420 [#] 20	7900 [#] 20
4026.72 [‡]	17	1,2 ⁽⁺⁾	<17 ps		5460 [#] 20	7940 [#] 20
4060 [#]	20				5500 [#] 20	7980 [#] 20
4097.74 [‡]	20	1,2 ⁽⁺⁾	<18 ps		5540 [#] 20	8020 [#] 20
4140 [#]	20				5580 [#] 20	8060 [#] 20
4180 [#]	20				5620 [#] 20	8100 [#] 20
4220 [#]	20				5660 [#] 20	8140 [#] 20
4260 [#]	20				5700 [#] 20	8180 [#] 20
4289.42 [‡]	22	(0,1,2) ⁻			5740 [#] 20	8220 [#] 20
4340 [#]	20				5780 [#] 20	8260 [#] 20
4380 [#]	20				5820 [#] 20	8300 [#] 20
4420 [#]	20				5860 [#] 20	8340 [#] 20
4460 [#]	20				5900 [#] 20	8380 [#] 20
4500 [#]	20				5940 [#] 20	8420 [#] 20
4540 [#]	20				5980 [#] 20	8460 [#] 20
4580 [#]	20				6020 [#] 20	8500 [#] 20
4620 [#]	20				6060 [#] 20	
4660 [#]	20				6100 [#] 20	

[†] From a least-squares fit to E_γ data.

[‡] New level reported by 2005Gi17.

[#] Pseudo level based on TAS results in 2013Pe13, a group at 8540 with ε feeding of 0.002% *II* is omitted here since it is above the Q(ε) value. This group is not included in Adopted dataset.

[@] From $\beta\gamma(t)$ (2005Gi17).

[&] From Adopted Levels.

⁷⁶Rb $\epsilon+\beta^+$ decay (36.5 s) 2005Gi17,1985Pi08,1984Mo22 (continued)

ϵ, β^+ radiations

av E β : [Additional information 1.](#)

E(decay)	E(level)	I β^+ #	I ϵ #	Log ft	I($\epsilon+\beta^+$) †#	Comments
(35 21)	8500		0.0012 9	3.1 +12-16	0.0012 9	ϵ K=0.74 7; ϵ L=0.21 6; ϵ M+=0.050 13
(75 21)	8460		6×10 ⁻⁴ 4	4.3 +7-6	6×10 ⁻⁴ 4	ϵ K=0.833 25; ϵ L=0.136 19; ϵ M+=0.031 5
(115 21)	8420		3.5×10 ⁻⁴ 17	4.9 +5-4	3.5×10 ⁻⁴ 17	ϵ K=0.852 7; ϵ L=0.121 6; ϵ M+=0.0274 15
(155 21)	8380		2.6×10 ⁻⁴ 12	5.4 +4-3	2.6×10 ⁻⁴ 12	ϵ K=0.860 4; ϵ L=0.1146 28; ϵ M+=0.0258 8
(195 21)	8340		2.7×10 ⁻⁴ 9	5.55 +28-24	2.7×10 ⁻⁴ 9	ϵ K=0.8639 23; ϵ L=0.1112 17; ϵ M+=0.0249 5
(235 21)	8300		3.9×10 ⁻⁴ 4	5.56 +13-14	3.9×10 ⁻⁴ 4	ϵ K=0.8667 16; ϵ L=0.1090 11; ϵ M+=0.0244 4
(275 21)	8260		7.0×10 ⁻⁴ 18	5.45 +20-18	7.0×10 ⁻⁴ 18	ϵ K=0.8686 12; ϵ L=0.1075 8; ϵ M+=0.02397 32
(315 21)	8220		0.0013 5	5.31 +28-21	0.0013 5	ϵ K=0.870 1; ϵ L=0.1064 7; ϵ M+=0.02369 27
(355 21)	8180		0.0023 8	5.17 +25-19	0.0023 8	ϵ K=0.8710 8; ϵ L=0.1055 5; ϵ M+=0.02347 25
(395 21)	8140		0.0038 6	5.05 +13-12	0.0038 6	ϵ K=0.8718 7; ϵ L=0.1048 5; ϵ M+=0.02330 22
(435 21)	8100		0.00569 18	4.96 +6-7	0.00569 18	ϵ K=0.8725 6; ϵ L=0.1043 4; ϵ M+=0.02317 21
(475 21)	8060		0.0077 4	4.90 7	0.0077 4	ϵ K=0.8731 6; ϵ L=0.1039 3; ϵ M+=0.02305 20
(515 21)	8020		0.0092 4	4.90 6	0.0092 4	ϵ K=0.8735 5; ϵ L=0.10350 31; ϵ M+=0.02296 19
(555 21)	7980		0.0090 9	4.97 +9-8	0.0090 9	ϵ K=0.8739 5; ϵ L=0.10318 29; ϵ M+=0.02288 18
(595 21)	7940		0.0067 8	5.16 9	0.0067 8	ϵ K=0.8743 5; ϵ L=0.10291 27; ϵ M+=0.02281 18
(635 21)	7900		0.0038 4	5.47 +9-8	0.0038 4	ϵ K=0.8746 5; ϵ L=0.10267 25; ϵ M+=0.02275 17
(675 21)	7860		0.00168 32	5.88 +13-11	0.00168 32	ϵ K=0.8748 4; ϵ L=0.10246 23; ϵ M+=0.02270 17
(715 21)	7820		7.0×10 ⁻⁴ 22	6.31 +20-15	7.0×10 ⁻⁴ 22	ϵ K=0.8751 4; ϵ L=0.10228 22; ϵ M+=0.02265 16
(755 21)	7780		3.1×10 ⁻⁴ 11	6.71 +22-17	3.1×10 ⁻⁴ 11	ϵ K=0.8753 4; ϵ L=0.10211 21; ϵ M+=0.02260 16
(795 21)	7740		1.6×10 ⁻⁴ 7	7.04 +28-19	1.6×10 ⁻⁴ 7	ϵ K=0.8755 4; ϵ L=0.10196 20; ϵ M+=0.02257 16
(835 21)	7700		1.1×10 ⁻⁴ 5	7.25 +29-19	1.1×10 ⁻⁴ 5	ϵ K=0.8756 4; ϵ L=0.10183 20; ϵ M+=0.02254 16
(875 21)	7660		9×10 ⁻⁵ 4	7.38 +29-19	9×10 ⁻⁵ 4	ϵ K=0.8758 4; ϵ L=0.10171 19; ϵ M+=0.02250 16
(915 21)	7620		1.0×10 ⁻⁴ 5	7.37 +33-21	1.0×10 ⁻⁴ 5	ϵ K=0.8759 4; ϵ L=0.10160 19; ϵ M+=0.02248 16
(955 21)	7580		1.4×10 ⁻⁴ 5	7.26 +22-16	1.4×10 ⁻⁴ 5	ϵ K=0.8760 4; ϵ L=0.10150 18; ϵ M+=0.02245 15
(995 21)	7540		2.1×10 ⁻⁴ 7	7.12 +20-15	2.1×10 ⁻⁴ 7	ϵ K=0.8762 4; ϵ L=0.10141 18; ϵ M+=0.02243 15
(1035 21)	7500	6.59×10 ⁻¹³	3.7×10 ⁻⁴ 6	25.5	3.7×10 ⁻⁴ 6	av E β =0.04; ϵ K=0.8763 4; ϵ L=0.10132 17; ϵ M+=0.02241 15
(1075 21)	7460	2.49×10 ⁻⁹	7.3×10 ⁻⁴ 9	6.65 8	7.3×10 ⁻⁴ 9	av E β =27 10; ϵ K=0.8764 4; ϵ L=0.10125 17; ϵ M+=0.02239 15

Continued on next page (footnotes at end of table)

⁷⁶Rb ε+β⁺ decay (36.5 s) [2005Gi17](#),[1985Pi08](#),[1984Mo22](#) (continued)

ε,β⁺ radiations (continued)

E(decay)	E(level)	Iβ ⁺ #	Iε [#]	Log ft	I(ε+β ⁺) †#	Comments
(1115 2I)	7420	7.62×10 ⁻⁸	0.0015 6	6.37 +25-17	0.0015 6	av Eβ=45 9; εK=0.8764 4; εL=0.10117 17; εM+=0.02236 15
(1155 2I)	7380	8.72×10 ⁻⁷	0.0034 16	6.04 +30-19	0.0034 16	av Eβ=63 9; εK=0.8763 4; εL=0.10108 17; εM+=0.02234 15
(1195 2I)	7340	6×10 ⁻⁶ 5	0.0073 31	5.74 +27-18	0.0073 31	av Eβ=81 9; εK=0.8759 6; εL=0.10096 17; εM+=0.02232 15
(2275 2I)	6260	0.059 8	0.047 4	5.51 +7-6	0.106 9	av Eβ=547 9; εK=0.389 13; εL=0.0444 15; εM+=0.0098 3
(2315 2I)	6220	0.064 8	0.046 4	5.53 +7-6	0.110 9	av Eβ=564 9; εK=0.367 13; εL=0.0419 14; εM+=0.00926 28
(2355 2I)	6180	0.067 5	0.0434 28	5.57 5	0.110 6	av Eβ=582 9; εK=0.347 12; εL=0.0396 14; εM+=0.00873 27
(2395 2I)	6140	0.067 6	0.0399 29	5.62 6	0.107 7	av Eβ=600 9; εK=0.327 11; εL=0.0373 13; εM+=0.00824 25
(2435 2I)	6100	0.067 7	0.0365 31	5.68 6	0.104 8	av Eβ=618 9; εK=0.308 11; εL=0.0352 12; εM+=0.00777 24
(2475 2I)	6060	0.068 9	0.034 4	5.72 7	0.102 10	av Eβ=636 9; εK=0.291 10; εL=0.0332 12; εM+=0.00732 23
(2515 2I)	6020	0.072 11	0.033 4	5.75 +8-7	0.105 12	av Eβ=654 9; εK=0.274 10; εL=0.0313 11; εM+=0.00690 21
(2555 2I)	5980	0.081 15	0.034 5	5.75 +9-8	0.115 16	av Eβ=672 9; εK=0.259 9; εL=0.0295 10; εM+=0.00651 20
(2595 2I)	5940	0.098 21	0.038 6	5.72 +10-9	0.136 22	av Eβ=690 9; εK=0.244 8; εL=0.0278 10; εM+=0.00615 19
(2635 2I)	5900	0.121 17	0.043 5	5.68 +8-7	0.164 18	av Eβ=708 9; εK=0.231 8; εL=0.0263 9; εM+=0.00580 18
(2675 2I)	5860	0.151 21	0.050 6	5.63 +8-7	0.201 22	av Eβ=726 9; εK=0.218 7; εL=0.0248 9; εM+=0.00547 17
(2715 2I)	5820	0.175 21	0.053 5	5.61 7	0.228 22	av Eβ=744 9; εK=0.206 7; εL=0.0234 8; εM+=0.00518 16
(2755 2I)	5780	0.192 23	0.055 6	5.61 7	0.247 24	av Eβ=762 9; εK=0.194 7; εL=0.0222 8; εM+=0.00489 15
(2795 2I)	5740	0.206 23	0.054 5	5.63 +7-6	0.260 24	av Eβ=780 9; εK=0.184 6; εL=0.0209 7; εM+=0.00463 14
(2835 2I)	5700	0.225 29	0.055 6	5.63 7	0.28 3	av Eβ=799 9; εK=0.174 6; εL=0.0198 7; εM+=0.00438 13
(2875 2I)	5660	0.27 4	0.062 8	5.59 8	0.33 4	av Eβ=817 9; εK=0.165 5; εL=0.0188 6; εM+=0.00414 12
(2915 2I)	5620	0.35 5	0.076 9	5.52 +8-7	0.43 5	av Eβ=835 9; εK=0.156 5; εL=0.0178 6; εM+=0.00392 12
(2955 2I)	5580	0.50 7	0.101 12	5.41 +8-7	0.60 7	av Eβ=853 9; εK=0.148 5; εL=0.0168 6; εM+=0.00371 11
(2995 2I)	5540	0.71 10	0.134 17	5.30 +8-7	0.84 10	av Eβ=872 9; εK=0.140 5; εL=0.0160 5; εM+=0.00353 10
(3035 2I)	5500	0.92 16	0.165 25	5.22 +9-8	1.09 16	av Eβ=890 9; εK=0.133 4; εL=0.0152 5; εM+=0.00335 10
(3075 2I)	5460	1.04 22	0.174 32	5.20 +11-10	1.21 22	av Eβ=908 9; εK=0.126 4; εL=0.0144 5; εM+=0.00318 9
(3115 2I)	5420	0.98 17	0.155 24	5.27 9	1.13 17	av Eβ=927 9; εK=0.120 4; εL=0.0137 4; εM+=0.00302 9
(3155 2I)	5380	0.83 9	0.124 12	5.38 +7-6	0.95 9	av Eβ=945 9; εK=0.114 4; εL=0.0130 4; εM+=0.00287 8
(3195 2I)	5340	0.666 30	0.094 5	5.51 4	0.76 3	av Eβ=964 9; εK=0.1088 34; εL=0.0124 4; εM+=0.00273 8
(3235 2I)	5300	0.56 6	0.076 7	5.61 +7-6	0.64 6	av Eβ=982 9; εK=0.1036 32; εL=0.0118 4; εM+=0.00260 7
(3275 2I)	5260	0.50 7	0.063 8	5.70 +8-7	0.56 7	av Eβ=1001 9; εK=0.0987 30; εL=0.01123 34;

Continued on next page (footnotes at end of table)

⁷⁶Rb ε+β⁺ decay (36.5 s) [2005Gi17](#),[1985Pi08](#),[1984Mo22](#) (continued)

ε,β⁺ radiations (continued)

E(decay)	E(level)	Iβ ⁺ #	Iε [#]	Log <i>f</i> _t	I(ε+β ⁺) †#	Comments
(3315 2I)	5220	0.46 5	0.056 6	5.77 +7-6	0.52 5	εM+=0.00248 7 av Eβ=1019 9; εK=0.0941 28; εL=0.01071 32; εM+=0.00236 6
(3355 2I)	5180	0.441 24	0.0502 29	5.82 4	0.491 24	av Eβ=1038 9; εK=0.0898 27; εL=0.01021 30; εM+=0.00225 6
(3395 2I)	5140	0.42 4	0.046 4	5.87 6	0.47 4	av Eβ=1056 9; εK=0.0857 25; εL=0.00975 29; εM+=0.00215 6
(3435 2I)	5100	0.41 6	0.042 6	5.92 8	0.45 6	av Eβ=1075 9; εK=0.0818 24; εL=0.00931 27; εM+=0.00206 5
(3475 2I)	5060	0.37 6	0.037 5	5.99 +9-8	0.41 6	av Eβ=1093 9; εK=0.0782 23; εL=0.00890 26; εM+=0.00196 5
(3515 2I)	5020	0.33 5	0.031 4	6.08 +9-8	0.36 5	av Eβ=1112 9; εK=0.0748 21; εL=0.00851 24; εM+=0.00187 5
(3555 2I)	4980	0.29 4	0.0261 33	6.16 +8-7	0.32 4	av Eβ=1130 9; εK=0.0716 20; εL=0.00814 23; εM+=0.00179 5
(3595 2I)	4940	0.277 30	0.0234 24	6.21 +7-6	0.30 3	av Eβ=1149 9; εK=0.0685 19; εL=0.00779 22; εM+=0.00172 4
(3635 2I)	4900	0.269 19	0.0218 15	6.26 5	0.291 19	av Eβ=1168 9; εK=0.0656 18; εL=0.00747 21; εM+=0.00165 4
(3675 2I)	4860	0.283 8	0.0219 8	6.264 33	0.305 8	av Eβ=1186 9; εK=0.0629 17; εL=0.00715 20; εM+=0.00158 4
(3715 2I)	4820	0.324 26	0.0239 19	6.23 5	0.348 26	av Eβ=1205 9; εK=0.0603 16; εL=0.00686 19; εM+=0.00151 4
(3755 2I)	4780	0.38 6	0.027 4	6.19 +9-8	0.41 6	av Eβ=1224 9; εK=0.0579 16; εL=0.00658 18; εM+=0.00145 4
(3795 2I)	4740	0.43 8	0.029 5	6.17 +10-9	0.46 8	av Eβ=1242 9; εK=0.0556 15; εL=0.00632 17; εM+=0.001394 34
(3835 2I)	4700	0.45 8	0.029 5	6.18 +10-9	0.48 8	av Eβ=1261 9; εK=0.0534 14; εL=0.00607 16; εM+=0.001339 32
(3875 2I)	4660	0.42 8	0.026 5	6.23 +11-9	0.45 8	av Eβ=1280 9; εK=0.0513 13; εL=0.00583 15; εM+=0.001287 31
(3915 2I)	4620	0.36 6	0.0213 34	6.33 +9-8	0.38 6	av Eβ=1298 9; εK=0.0493 13; εL=0.00561 15; εM+=0.001236 29
(3955 2I)	4580	0.34 5	0.0194 27	6.38 8	0.36 5	av Eβ=1317 9; εK=0.0474 12; εL=0.00539 14; εM+=0.001190 28
(3995 2I)	4540	0.35 7	0.019 4	6.39 +11-10	0.37 7	av Eβ=1336 9; εK=0.0457 12; εL=0.00519 13; εM+=0.001145 26
(4035 2I)	4500	0.45 11	0.024 6	6.31 +14-11	0.47 11	av Eβ=1355 9; εK=0.0440 11; εL=0.00500 13; εM+=0.001103 25
(4075 2I)	4460	0.64 17	0.032 8	6.19 +15-12	0.67 17	av Eβ=1373 9; εK=0.0423 11; εL=0.00481 12; εM+=0.001062 24
(4115 2I)	4420	0.87 21	0.042 10	6.08 +13-11	0.91 21	av Eβ=1392 9; εK=0.0408 10; εL=0.00464 11; εM+=0.001023 23
(4155 2I)	4380	1.01 26	0.047 12	6.04 +14-11	1.06 26	av Eβ=1411 9; εK=0.0393 10; εL=0.00447 11; εM+=9.86×10 ⁻⁴ 22
(4195 2I)	4340	1.0 5	0.043 22	6.08 +32-20	1.0 5	av Eβ=1430 9; εK=0.0379 9; εL=0.00431 10; εM+=9.51×10 ⁻⁴ 21
(4246 4)	4289.42	1.94 8	0.0834 34	5.810 27	2.02 8	av Eβ=1454.0 19; εK=0.03627 34; εL=0.00412 4; εM+=9.10×10 ⁻⁴ 9 I(ε+β ⁺): 2.3 (2005Gi17), 0.782 14 for a 4300 group (2013Pe13).
(4275 2I)	4260	0.59 11	0.025 4	6.35 +11-9	0.61 11	av Eβ=1468 9; εK=0.0353 8; εL=0.00402 10; εM+=8.86×10 ⁻⁴ 19
(4315 2I)	4220	0.509 25	0.0206 11	6.43 4	0.530 25	av Eβ=1487 9; εK=0.0341 8; εL=0.00388 9; εM+=8.56×10 ⁻⁴ 19
(4355 2I)	4180	0.52 2	0.0203 9	6.45 +4-3	0.54 2	av Eβ=1505 9; εK=0.0330 8; εL=0.00375 9;

Continued on next page (footnotes at end of table)

^{76}Rb $\varepsilon+\beta^+$ decay (36.5 s) **2005Gi17,1985Pi08,1984Mo22** (continued) ε, β^+ radiations (continued)

E(decay)	E(level)	$I\beta^+$ #	$I\varepsilon^{\#}$	Log <i>ft</i>	$I(\varepsilon+\beta^+)^{\dagger\#}$	Comments
(4395 21)	4140	0.588 25	0.0221 10	6.42 4	0.610 25	$\varepsilon M+=8.26\times 10^{-4}$ 18 av $E\beta=1524$ 9; $\varepsilon K=0.0319$ 7; $\varepsilon L=0.00362$ 8; $\varepsilon M+=7.99\times 10^{-4}$ 17
(4437 4)	4097.74	1.48 13	0.054 5	6.04 +5-4	1.53 13	av $E\beta=1544.1$ 19; $\varepsilon K=0.03075$ 28; $\varepsilon L=0.003493$ 32; $\varepsilon M+=7.70\times 10^{-4}$ 8 $I(\varepsilon+\beta^+)$: 1.8 (2005Gi17), 0.74 2 for a 4100 group (2013Pe13).
(4475 21)	4060	0.80 6	0.0282 21	6.33 5	0.83 6	av $E\beta=1562$ 9; $\varepsilon K=0.0298$ 7; $\varepsilon L=0.00339$ 8; $\varepsilon M+=7.47\times 10^{-4}$ 16
(4508 4)	4026.72	1.54 21	0.052 7	6.06 +7-6	1.59 21	av $E\beta=1577.7$ 19; $\varepsilon K=0.02899$ 26; $\varepsilon L=0.003293$ 30; $\varepsilon M+=7.27\times 10^{-4}$ 7 $I(\varepsilon+\beta^+)$: 2.0 (2005Gi17), 0.85 16 for a 4020 group (2013Pe13).
(4548 4)	3986.6	0.98 13	0.032 4	6.28 +7-6	1.01 13	av $E\beta=1596.6$ 19; $\varepsilon K=0.02806$ 25; $\varepsilon L=0.003187$ 29; $\varepsilon M+=7.03\times 10^{-4}$ 7 $I(\varepsilon+\beta^+)$: 1.2 (2005Gi17).
(4557 4)	3978.0	0.79 19	0.026 6	6.38 +12-10	0.82 19	av $E\beta=1600.9$ 19; $\varepsilon K=0.02786$ 25; $\varepsilon L=0.003165$ 29; $\varepsilon M+=6.98\times 10^{-4}$ 7 $I(\varepsilon+\beta^+)$: 0.5 (2005Gi17), 0.71 14 for a 3980 group (2013Pe13).
(4595 21)	3940	0.47 9	0.0151 28	6.62 +11-9	0.49 9	av $E\beta=1619$ 9; $\varepsilon K=0.0270$ 6; $\varepsilon L=0.00307$ 7; $\varepsilon M+=6.78\times 10^{-4}$ 14
(4635 21)	3900	0.284 10	0.0087 4	6.868 33	0.293 10	av $E\beta=1638$ 9; $\varepsilon K=0.0262$ 6; $\varepsilon L=0.00297$ 7; $\varepsilon M+=6.56\times 10^{-4}$ 13
(4675 21)	3860	0.165 20	0.0049 6	7.13 7	0.17 2	av $E\beta=1657$ 9; $\varepsilon K=0.0254$ 6; $\varepsilon L=0.00288$ 6; $\varepsilon M+=6.35\times 10^{-4}$ 13
(4715 21)	3820	0.117 25	0.0034 7	7.30 +12-10	0.120 25	av $E\beta=1676$ 9; $\varepsilon K=0.0246$ 5; $\varepsilon L=0.00279$ 6; $\varepsilon M+=6.16\times 10^{-4}$ 12
(4755 21)	3780	0.126 20	0.0035 5	7.28 +9-8	0.13 2	av $E\beta=1695$ 9; $\varepsilon K=0.0238$ 5; $\varepsilon L=0.00271$ 6; $\varepsilon M+=5.97\times 10^{-4}$ 12
(4795 21)	3740	0.243 25	0.0066 7	7.02 6	0.250 25	av $E\beta=1714$ 10; $\varepsilon K=0.0231$ 5; $\varepsilon L=0.00262$ 6; $\varepsilon M+=5.79\times 10^{-4}$ 12
(4835 21)	3700	0.594 20	0.0156 6	6.654 32	0.61 2	av $E\beta=1733$ 10; $\varepsilon K=0.0224$ 5; $\varepsilon L=0.00255$ 5; $\varepsilon M+=5.62\times 10^{-4}$ 11
(4863 4)	3672.24	0.42 5	0.0108 13	6.82 6	0.43 5	av $E\beta=1746.1$ 19; $\varepsilon K=0.02196$ 19; $\varepsilon L=0.002494$ 22; $\varepsilon M+=5.50\times 10^{-4}$ 6 $I(\varepsilon+\beta^+)$: 0.5 (2005Gi17), 9.7 11 (2013Pe13).
(4899 4)	3636.3	1.05 19	0.026 5	6.44 +9-8	1.08 19	av $E\beta=1763.2$ 19; $\varepsilon K=0.02138$ 19; $\varepsilon L=0.002428$ 22; $\varepsilon M+=5.36\times 10^{-4}$ 5 $I(\varepsilon+\beta^+)$: 1.3 (2005Gi17).
(4932 4)	3602.81	5.8 6	0.140 14	5.72 +6-5	5.9 6	av $E\beta=1778.9$ 19; $\varepsilon K=0.02086$ 18; $\varepsilon L=0.002368$ 21; $\varepsilon M+=5.22\times 10^{-4}$ 5 $I(\varepsilon+\beta^+)$: 7.0 (2005Gi17), 2.24 38 (2013Pe13).
(5079 4)	3456.1	0.23 5	0.0049 11	7.20 +12-9	0.23 5	av $E\beta=1848.9$ 19; $\varepsilon K=0.01876$ 16; $\varepsilon L=0.002130$ 19; $\varepsilon M+=4.70\times 10^{-4}$ 5 $I(\varepsilon+\beta^+)$: 0.3 (2005Gi17), 1.20 11 (2013Pe13).
(5113 4)	3421.6	0.297 23	0.0063 5	7.09 4	0.303 23	av $E\beta=1865.1$ 19; $\varepsilon K=0.01831$ 16; $\varepsilon L=0.002079$ 18; $\varepsilon M+=4.58\times 10^{-4}$ 5 $I(\varepsilon+\beta^+)$: 0.4 (2005Gi17), 0.17 7 (2013Pe13).
(5259 4)	3275.91	0.58 4	0.0111 8	6.87 4	0.59 4	av $E\beta=1934.8$ 19; $\varepsilon K=0.01656$ 14; $\varepsilon L=0.001880$ 16; $\varepsilon M+=4.15\times 10^{-4}$ 4 $I(\varepsilon+\beta^+)$: 0.7 (2005Gi17), 0.46 13 (2013Pe13).
(5293 4)	3242.1	1.37 30	0.026 6	6.51 +11-9	1.4 3	av $E\beta=1951.0$ 19; $\varepsilon K=0.01618$ 14; $\varepsilon L=0.001837$

Continued on next page (footnotes at end of table)

⁷⁶Rb ε+β⁺ decay (36.5 s) **2005Gi17,1985Pi08,1984Mo22 (continued)**

						<u>ε,β⁺ radiations (continued)</u>
<u>E(decay)</u>	<u>E(level)</u>	<u>Iβ⁺ #</u>	<u>Iε[#]</u>	<u>Log ft</u>	<u>I(ε+β⁺)[†]#</u>	<u>Comments</u>
(5511 4)	3024.42	7.6 5	0.123 8	5.87 4	7.7 5	I6; εM+=4.06×10 ⁻⁴ 4 I(ε+β ⁺): 1.6 (2005Gi17), 1.29 12 (2013Pe13). av Eβ=2055.2 19; εK=0.01403 12; εL=0.001592 14; εM+=3.51×10 ⁻⁴ 3 I(ε+β ⁺): 6.8 (2005Gi17), 11.74 30 (2013Pe13).
(5565 4)	2970.1	0.49 4	0.0077 6	7.08 +5-4	0.50 4	av Eβ=2081.1 19; εK=0.01355 11; εL=0.001538 13; εM+=3.392×10 ⁻⁴ 34 I(ε+β ⁺): 0.6 (2005Gi17), 3.94 24 (2013Pe13).
(5608 4)	2926.59	9 1	0.137 15	5.84 +6-5	9.1 10	av Eβ=2101.7 19; εK=0.01318 11; εL=0.001496 13; εM+=3.300×10 ⁻⁴ 33 I(ε+β ⁺): 12.3 (2005Gi17), 4.0 5 (2013Pe13).
(5718 4)	2816.57	3.1 4	0.043 6	6.36 +7-6	3.1 4	av Eβ=2154.4 19; εK=0.01231 10; εL=0.001397 12; εM+=3.083×10 ⁻⁴ 30 I(ε+β ⁺): 2.6 (2005Gi17), 0.788 18 (2013Pe13).
(5760 4)	2774.94	2.66 30	0.037 4	6.43 +6-5	2.7 3	av Eβ=2174.5 19; εK=0.01201 10; εL=0.001362 12; εM+=3.005×10 ⁻⁴ 29 I(ε+β ⁺): 2.1 (2005Gi17), 0.26 4 (2013Pe13).
(5793 4)	2742.27	0.087 9	0.0047 5	11.52 ^{2u} 4	0.092 9	av Eβ=2221.2 20; εK=0.04453 46; εL=0.005189 54; εM+=0.001066 11 I(ε+β ⁺): 0.10 (2005Gi17), 2.1 5 (2013Pe13).
(5835 4)	2700.16	0.32 4	0.0042 5	7.39 +7-6	0.32 4	av Eβ=2210.5 19; εK=0.01148 10; εL=0.001302 11; εM+=2.873×10 ⁻⁴ 28 I(ε+β ⁺): 0.5 (2005Gi17), 5.5 6 (2013Pe13).
(5954 4)	2581.11	0.45 8	0.0056 10	7.28 +9-8	0.46 8	av Eβ=2267.6 19; εK=0.01070 9; εL=0.001214 10; εM+=2.677×10 ⁻⁴ 26 I(ε+β ⁺): 0.5 (2005Gi17), 6.0 9 (2013Pe13).
(5964 4)	2571.01	15.3 4	0.188 5	5.759 20	15.5 4	av Eβ=2272.4 19; εK=0.01063 9; εL=0.001207 10; εM+=2.661×10 ⁻⁴ 26 I(ε+β ⁺): from 2013Pe13. The gamma intensity balance gives 43.4 14, 2005Gi17 list 34 (2005Gi17), 15.5 4 (2013Pe13).
(6202 4)	2332.70	0.208 30	0.00222 32	7.72 +8-7	0.21 3	av Eβ=2386.9 19; εK=0.00929 8; εL=0.001054 9; εM+=2.324×10 ⁻⁴ 22 I(ε+β ⁺): 0.2 (2005Gi17), 0.340 25 (2013Pe13).
(6278 [Ⓢ] 4)	2257.54	<1.08	<0.02	>8.9	<1.1	av Eβ=2419.7 19; εK=0.01935 16; εL=0.002205 18; εM+=4.87×10 ⁻⁴ 5 I(ε+β ⁺): 0.7 (2005Gi17), 0.0150 25 (2013Pe13). The feeding is considered as questionable since log ft is too low to be realistic for ΔJ=2, Δπ=no β transition.
(6308 4)	2227.28	6.9 4	0.070 4	6.238 +34-33	7.0 4	av Eβ=2437.9 19; εK=0.00877 7; εL=9.94×10 ⁻⁴ 8; εM+=2.194×10 ⁻⁴ 21 I(ε+β ⁺): 6.9 (2005Gi17), 0.013 2 (2013Pe13).
(6343 4)	2192.50	0.228 30	0.00225 29	7.73 +7-6	0.23 3	av Eβ=2454.8 19; εK=0.00860 7; εL=9.76×10 ⁻⁴ 8; εM+=2.153×10 ⁻⁴ 21 I(ε+β ⁺): 0.3 (2005Gi17), 0.12 20 (2013Pe13).
(6395 4)	2140.16	0.49 18	0.0047 17	7.43 +21-14	0.49 18	av Eβ=2479.8 19; εK=0.00836 7; εL=9.49×10 ⁻⁴ 8; εM+=2.092×10 ⁻⁴ 20 I(ε+β ⁺): 0.6 (2005Gi17), 0.000672 20 (2013Pe13).
(6431 4)	2104.33	5.6 5	0.053 5	6.37 5	5.7 5	av Eβ=2497.2 19; εK=0.00821 7;

Continued on next page (footnotes at end of table)

⁷⁶Rb ε+β⁺ decay (36.5 s) **2005Gi17,1985Pi08,1984Mo22 (continued)**

<u>ε,β⁺ radiations (continued)</u>						
<u>E(decay)</u>	<u>E(level)</u>	<u>Iβ⁺ #</u>	<u>Iε[#]</u>	<u>Log ft</u>	<u>I(ε+β⁺)[†]#</u>	<u>Comments</u>
(6444 4)	2091.49	0.49 12	0.0045 11	7.44 +13-10	0.49 12	εL=9.31×10 ⁻⁴ 8; εM+=2.053×10 ⁻⁴ 20 I(ε+β ⁺): 5.5 (2005Gi17), 0.0098 3 (2013Pe13). av Eβ=2503.4 19; εK=0.00815 7; εL=9.25×10 ⁻⁴ 8; εM+=2.040×10 ⁻⁴ 19 I(ε+β ⁺): 0.8 (2005Gi17), 0.000743 14 (2013Pe13).
(6802 4)	1733.26	0.82 19	0.0137 31	9.26 ^{1u} +12-10	0.83 [‡] 19	av Eβ=2668.9 19; εK=0.01452 12; εL=0.001653 13; εM+=3.65×10 ⁻⁴ 3 I(ε+β ⁺): 0.6 (2005Gi17).
(6848 4)	1687.32	1.5 6	0.011 5	7.10 +23-15	1.5 [‡] 6	av Eβ=2698.4 19; εK=0.00663 5; εL=7.52×10 ⁻⁴ 6; εM+=1.659×10 ⁻⁴ 16 I(ε+β ⁺): 1.7 (2005Gi17).
(6937 4)	1598.07	0.35 22	0.0025 16	7.8 +4-2	0.35 [‡] 22	av Eβ=2741.4 19; εK=0.00635 5; εL=7.20×10 ⁻⁴ 6; εM+=1.588×10 ⁻⁴ 15 I(ε+β ⁺): 0.09 (2005Gi17).
(7313 4)	1221.72	1.4 5	0.0085 30	7.29 +20-14	1.4 [‡] 5	av Eβ=2923.3 19; εK=0.00532 4; εL=6.03×10 ⁻⁴ 5; εM+=1.330×10 ⁻⁴ 12 I(ε+β ⁺): 1.5 (2005Gi17).
(7500 [@] 4)	1034.75	<0.98	<0.02	>11.6	<1 [‡]	av Eβ=3008.8 19; εK=0.01758 14; εL=0.002007 16; εM+=4.43×10 ⁻⁴ 4 I(ε+β ⁺): 0.5 (2005Gi17). The feeding is considered as questionable since log ft is too low to be realistic for ΔJ=3, Δπ=yes β transition.
(7765 [@] 4)	769.94	<0.49752	<0.002483	>7.9	<0.5 [‡]	av Eβ=3142.5 19; εK=0.004363 33; εL=4.95×10 ⁻⁴ 4; εM+=1.091×10 ⁻⁴ 10 I(ε+β ⁺): 0.7 (2005Gi17).
(8111 [@] 4)	424.05				[‡]	I(ε+β ⁺): 2005Gi17 give 0.8, evaluators obtain -4 2.

[†] Feedings for levels up to 3672.1 keV, and at 40-keV interval above this energy are deduced by 2013Pe13 using an iterative Expectation- Maximization (EM) method. Feedings below 0.0001% are set to zero. Total ε+β⁺ feeding in Table IV of 2013Pe13 adds to 95.9% 21. Large range of uncertainties reported from (a) deformation assumptions for unknown level scheme calculations; (b) strength function parameterization; (c) assumptions of position of last (cutoff) level; (d) uncertainties in subtracting contaminants; and (e) statistical uncertainty in feeding distribution. Uncertainties listed here are deduced by evaluators as averages between upper and lower uncertainties quoted by 2013Pe13. Total feedings deduced by evaluators here for discreet energy levels are from γ intensity balances, the values given by 2005Gi17 are somewhat different and are listed under comments. Corresponding values from TAS spectral analysis in 2013Pe13 are not in agreement in many cases.

[‡] TAS data in 2013Pe13 are consistent with zero β⁺+ε feeding.

Absolute intensity per 100 decays.

@ Existence of this branch is questionable.

γ(⁷⁶Kr)

I_γ normalization: Summed transition intensity to g.s.=100, assuming no direct β⁺,ε feeding to g.s. This assumption is supported by systematics of log ft values in A=76 nuclides: log ft>6 for 0⁺ to 1⁻ β transition in ⁷⁶Kr to ⁷⁶Br decay and >8.9 for 1⁻ to 0⁺ β transition in ⁷⁶Br to ⁷⁶Se nuclei.
 The following γ rays with energy (intensity) reported only by 1975We23 are discarded since these are not confirmed in any of the later studies: 64 (2.3), 244 (2.3), 254 (2.0), 869 (2.2), 937 (2.5). Also an unplaced 1120.8 3 γ with I_γ=0.7 2 in 1984Mo22 is omitted here since it is not reported by 2005Gi17.
 Experimental conversion coefficients given under comments are from 2005Gi17.

E _γ	I _γ ^a	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [@]	δ [@]	α [†]	Comments
324.3 [‡] 1	0.77 [‡] 4	3024.42	(2) ⁻	2700.16	2 ⁺	[E1]		0.00299 4	α(K)=0.00265 4; α(L)=0.000283 4; α(M)=4.56×10 ⁻⁵ 6 α(N)=4.57×10 ⁻⁶ 6 %I _γ =0.337 21 I _γ (324.3γ)/I _γ (453.5γ)=14.5 8/100 4.
345.9 [#] 1	13.2 [#] 4	769.94	0 ⁺	424.05	2 ⁺	E2		0.01045 15	α(K)exp=0.0093 3 α(K)=0.00922 13; α(L)=0.001049 15; α(M)=0.0001696 24 α(N)=1.666×10 ⁻⁵ 23 %I _γ =5.78 25
355.6 [#] 1	17.4 [#] 20	2926.59	0 ⁻ ,1 ⁻ ,2 ⁻	2571.01	1 ⁻	M1(+E2) ^{&}	<0.12 ^{&}	0.00484 8	α(K)exp=0.00422 15 α(K)=0.00429 7; α(L)=0.000464 7; α(M)=7.52×10 ⁻⁵ 12 α(N)=7.58×10 ⁻⁶ 12 %I _γ =7.6 9
376.4 [#] 1	0.5 [#] 1	1598.07	(0) ⁺	1221.72	2 ⁺	E2		0.00788 11	α(K)exp=0.0050 14 α(K)=0.00696 10; α(L)=0.000786 11; α(M)=0.0001271 18 α(N)=1.252×10 ⁻⁵ 18 %I _γ =0.22 5 I _γ (376.4γ)/I _γ (1174.0γ)=8.1 4/100 3 (2005Gi17).
378.5 [‡] 1	0.54 [‡] 2	2571.01	1 ⁻	2192.50		M1+E2 ^{&}	0.9 ^{&} +8-5	0.0057 11	α(K)exp=0.005 1 α(K)=0.0051 10; α(L)=0.00056 12; α(M)=9.1×10 ⁻⁵ 19 α(N)=9.1×10 ⁻⁶ 18 %I _γ =0.237 12 I _γ (378.5γ)/I _γ (2571.1γ)=0.70 3/100 4. %I _γ =0.13 5 I _γ (403.9γ)/I _γ (1321.6γ)=20.7 11/100 3.
403.9 [#] 3	0.3 [#] 1	2091.49	(2) ⁺	1687.32	2 ⁺				
417.1 [‡] 1	0.22 [‡] 2	2104.33	1 ⁻	1687.32	2 ⁺	[E1]		1.53×10 ⁻³ 2	α(K)=0.001362 19; α(L)=0.0001447 20; α(M)=2.338×10 ⁻⁵ 33

6

γ(⁷⁶Kr) (continued)

E _γ	I _γ ^a	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [@]	δ [@]	α [†]	Comments
424.0 [#] 1	100 [#] 4	424.05	2 ⁺	0.0	0 ⁺	E2 ^{&}		0.00535 8	α(N)=2.349×10 ⁻⁶ 33 %I _γ =0.096 9 I _γ (417.1γ)/I _γ (1680.3γ)=2.0 2/100 3. α(K)=0.00473 7; α(L)=0.000529 7; α(M)=8.55×10 ⁻⁵ 12
431.7 [‡] 5	0.52 [‡] 11	3456.1	(0 ⁻ ,1,2)	3024.42	(2) ⁻				α(N)=8.46×10 ⁻⁶ 12 %I _γ =43.8 13 %I _γ =0.23 5 E _γ =431.3 2, I _γ =0.6 2; unplaced (1984Mo22).
432.0 [‡] 9	0.13 [‡] 8	3672.24	(0,1,2)	3242.1	(1,2 ⁺)				%I _γ =0.06 4 E _γ : level-energy difference=430.1. I _γ (432.0γ)/I _γ (1567.8γ)=19 10/100 6.
443.3 [‡] 1	0.27 [‡] 3	3024.42	(2) ⁻	2581.11	(2 ⁺)	[E1]		1.31×10 ⁻³ 2	α(K)=0.001166 16; α(L)=0.0001238 17; α(M)=2.000×10 ⁻⁵ 28 α(N)=2.010×10 ⁻⁶ 28 %I _γ =0.118 14 I _γ (443.3γ)/I _γ (453.5γ)=5.0 5/100 4.
453.5 [#] 2	5.8 [#] 3	3024.42	(2) ⁻	2571.01	1 ⁻	M1(+E2)	0.3 3	0.00282 30	α(K)exp=0.0025 3 α(K)=0.00251 26; α(L)=0.000270 31; α(M)=4.4×10 ⁻⁵ 5 α(N)=4.4×10 ⁻⁶ 5 %I _γ =2.54 15 %I _γ =0.22 9 I _γ (466.0γ)/I _γ (917.4γ)=4.6 16/100 6.
466.0 [#] 3	0.5 [#] 2	1687.32	2 ⁺	1221.72	2 ⁺				%I _γ =0.11 5 I _γ (466.9γ)/I _γ (2571.1γ)=0.3 1/100 4.
466.9 [‡] 13	0.24 [‡] 10	2571.01	1 ⁻	2104.33	1 ⁻				α(K)exp=0.00091 20 α(K)=0.00104 9; α(L)=0.000111 10; α(M)=1.80×10 ⁻⁵ 16 α(N)=1.81×10 ⁻⁶ 16 %I _γ =0.79 5 I _γ (479.5γ)/I _γ (2571.1γ)=2.25 8/100 4.
479.5 [#] 1	1.8 [#] 1	2571.01	1 ⁻	2091.49	(2) ⁺	E1(+M2)	<0.17	0.00117 10	%I _γ =0.092 31 I _γ (493.4γ)/I _γ (1321.6γ)=14 5/100 3.
493.4 [‡] 1	0.21 [‡] 7	2091.49	(2) ⁺	1598.07	(0) ⁺				α(K)=0.000890 13; α(L)=9.44×10 ⁻⁵ 14; α(M)=1.526×10 ⁻⁵ 22 α(N)=1.535×10 ⁻⁶ 22 %I _γ =0.31 9 I _γ (493.8γ)/I _γ (1803.2γ)=6.4 18/100 3.
493.8 [‡] 7	0.7 [‡] 2	2227.28	2 ⁻	1733.26	3 ⁺	[E1]		1.00×10 ⁻³ 1	

⁷⁶Rb ε+β⁺ decay (36.5 s) **2005Gi17,1985Pi08,1984Mo22 (continued)**

γ(⁷⁶Kr) (continued)

E _γ	I _γ ^a	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. @	α [†]	I _(γ+ce) ^a	Comments
506.0 [‡] 9	0.8 [‡] 3	2104.33	1 ⁻	1598.07	(0) ⁺	[E1]	0.000944 14		α(K)=0.000839 12; α(L)=8.89×10 ⁻⁵ 13; α(M)=1.437×10 ⁻⁵ 21 α(N)=1.446×10 ⁻⁶ 21 %I _γ =0.35 13 I _γ (506.0γ)/I _γ (1680.3γ)=7 3/100 3. %I _γ =0.22 13 I _γ (511.6γ)/I _γ (1309.3γ)=20 12/100 4.
511.6 [‡] 2	0.5 [‡] 3	1733.26	3 ⁺	1221.72	2 ⁺				α(K)=0.000717 10; α(L)=7.59×10 ⁻⁵ 11; α(M)=1.227×10 ⁻⁵ 17 α(N)=1.235×10 ⁻⁶ 17 %I _γ =0.105 10 I _γ (540.0γ)/I _γ (1803.2γ)=2.2 2/100 3.
540.0 [‡] 1	0.24 [‡] 2	2227.28	2 ⁻	1687.32	2 ⁺	[E1]	0.000806 11		α(K)=0.001570 22; α(L)=0.0001716 24; α(M)=2.78×10 ⁻⁵ 4 α(N)=2.77×10 ⁻⁶ 4 %I _γ =1.75 10
610.6 [#] 1	4.0 [#] 2	1034.75	4 ⁺	424.05	2 ⁺	E2	1.77×10 ⁻³ 3		α(K)=0.001303 18; α(L)=0.0001419 20; α(M)=2.296×10 ⁻⁵ 32 α(N)=2.297×10 ⁻⁶ 32 %I _γ =0.22 5 I _γ (652.6γ)/I _γ (917.4γ)=9.2 3/100 6.
652.6 [#] 1	0.5 [#] 1	1687.32	2 ⁺	1034.75	4 ⁺	[E2]	1.47×10 ⁻³ 2		α(K)exp=0.0010 3 α(K)=0.00103 10; α(L)=0.000111 12; α(M)=1.80×10 ⁻⁵ 20 α(N)=1.81×10 ⁻⁶ 19 %I _γ =0.171 14 I _γ (686.5γ)/I _γ (1718.6γ)=14.4 11/100 4.
686.5 [‡] 4	0.39 [‡] 3	4289.42	(0,1,2) ⁻	3602.81	1 ⁻	M1,E2&	0.00116 12		α(K)exp=0.0014 6 α(K)=0.00099 10; α(L)=0.000106 11; α(M)=1.72×10 ⁻⁵ 18 α(N)=1.73×10 ⁻⁶ 18 %I _γ =0.092 9 I _γ (698.4γ)/I _γ (1309.3γ)=8.7 8/100 4.
698.4 [‡] 1	0.21 [‡] 2	1733.26	3 ⁺	1034.75	4 ⁺	M1,E2&	0.00111 11		α(K)exp=0.00089 17 α(K)=0.00079 6; α(L)=8.4×10 ⁻⁵ 7; α(M)=1.36×10 ⁻⁵ 12 α(N)=1.37×10 ⁻⁶ 11 %I _γ =1.36 10 I _γ (766.7γ)/I _γ (453.5γ)=56.6 17/100 4.
766.7 [#] 1	3.1 [#] 2	3024.42	(2) ⁻	2257.54	3 ⁻	M1,E2&	0.00089 7		ρ ² (E0,0 ⁺ to 0 ⁺)=0.079 11; X(E0/E2)=0.020 1 (2005Gi17). I _(γ+ce) : Ice(K)=0.029 relative to I _γ (424γ)=100
770		769.94	0 ⁺	0.0	0 ⁺	(E0)		0.035	

⁷⁶Rb ε+β⁺ decay (36.5 s) [2005Gi17](#),[1985Pi08](#),[1984Mo22](#) (continued)

γ(⁷⁶Kr) (continued)

<u>E_γ</u>	<u>I_γ^a</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[@]</u>	<u>δ[@]</u>	<u>α[†]</u>	<u>I_(γ+ce)^a</u>	<u>Comments</u>
797.6 [#] 1	9.9 [#] 3	1221.72	2 ⁺	424.05	2 ⁺	M1+E2	+0.2 1	0.000755 12		(2005Gi17). Evaluators have added 20% to this value to account for intensity from L, M and higher shells. %I _γ =4.34 19 α(K) _{exp} =0.00073 5 α(K)=0.000671 10; α(L)=7.12×10 ⁻⁵ 11; α(M)=1.153×10 ⁻⁵ 18 α(N)=1.168×10 ⁻⁶ 18 Mult.: M1, E2 from ce data; ΔJ=1, D+Q in (¹² C,2nγ). α(K) _{exp} =0.00058 6 α(K)=0.000625 9; α(L)=6.63×10 ⁻⁵ 9; α(M)=1.073×10 ⁻⁵ 15 α(N)=1.086×10 ⁻⁶ 15 %I _γ =1.40 14 I _γ (822.2γ)/I _γ (355.6γ)=14 4/100 3. E _γ : possible 813.9 3 K-conversion line in electron spectrum which may be E0 transition to 770, 0 ⁺ level. ρ ² (E0,0 ⁺ to 0 ⁺)>0.007; X(E0/E2)=0.15 3 for 376γ, 0.009 3 for 1174γ (2005Gi17). I _(γ+ce) : Ice(K)=0.0002 relative to I _γ (424γ)=100 (2005Gi17). Evaluators have added 20% to this value to account for intensity from L, M and higher shells.
822.2 [#] 2	3.2 [#] 3	2926.59	0 ⁻ ,1 ⁻ ,2 ⁻	2104.33	1 ⁻	M1&		0.000703 10		
828		1598.07	(0) ⁺	769.94	0 ⁺	(E0)			0.00024	
870 ^b		2091.49	(2) ⁺	1221.72	2 ⁺	M1,E2&		0.00066 4		α(K) _{exp} =0.0009 2 α(K)=0.000584 32; α(L)=6.2×10 ⁻⁵ 4; α(M)=1.01×10 ⁻⁵ 6 α(N)=1.02×10 ⁻⁶ 6 E _γ : from 2005Gi17 only, listed only in authors' table III, intensity or branching ratio is not available. Transition also not shown in authors' level scheme figure. The evaluators treat this transition as uncertain.
882.4 [‡] 2	2.4 [‡] 5	2104.33	1 ⁻	1221.72	2 ⁺	[E1]		0.000273 4		α(K)=0.0002430 34; α(L)=2.56×10 ⁻⁵ 4; α(M)=4.13×10 ⁻⁶ 6 α(N)=4.17×10 ⁻⁷ 6 %I _γ =1.05 22 E _γ : 882.4 5 with no I _γ value in 1985Pi08 . I _γ (882.4γ)/I _γ (1680.3γ)=22 5/100 3.
883.6 [#] 1	10.3 [#] 6	2571.01	1 ⁻	1687.32	2 ⁺	E1&		0.000272 4		α(K) _{exp} =0.000213 18 α(K)=0.0002423 34; α(L)=2.55×10 ⁻⁵ 4; α(M)=4.12×10 ⁻⁶ 6 α(N)=4.16×10 ⁻⁷ 6

⁷⁶Rb ε+β⁺ decay (36.5 s) **2005Gi17,1985Pi08,1984Mo22** (continued)

γ(⁷⁶Kr) (continued)

<u>E_γ</u>	<u>I_γ^a</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[@]</u>	<u>α[†]</u>	<u>Comments</u>
917.4 [#] 1	8.2 [#] 10	1687.32	2 ⁺	769.94	0 ⁺	[E2]	0.000608 9	%I _γ =4.51 30 I _γ (883.6γ)/I _γ (2571.1γ)=12.5 4/100 4. α(K)=0.000540 8; α(L)=5.79×10 ⁻⁵ 8; α(M)=9.37×10 ⁻⁶ 13 α(N)=9.42×10 ⁻⁷ 13 %I _γ =3.6 5
918.5 [‡] 7	1.2 [‡] 4	2140.16	(1,2 ⁺)	1221.72	2 ⁺			%I _γ =0.53 18
920.2 [‡] 1	0.89 [‡] 4	3024.42	(2) ⁻	2104.33	1 ⁻	M1,E2 ^{&}	0.000578 27	α(K)exp=0.00048 8 α(K)=0.000513 24; α(L)=5.47×10 ⁻⁵ 28; α(M)=8.9×10 ⁻⁶ 5 α(N)=8.9×10 ⁻⁷ 4 %I _γ =0.390 21 I _γ (920.2γ)/I _γ (453.5γ)=16.8 8/100 4.
973.0 [#] 1	4.8 [#] 3	2571.01	1 ⁻	1598.07	(0) ⁺	E1 ^{&}	0.0002251 32	α(K)exp=0.00021 3 α(K)=0.0002004 28; α(L)=2.105×10 ⁻⁵ 29; α(M)=3.40×10 ⁻⁶ 5 α(N)=3.44×10 ⁻⁷ 5 %I _γ =2.10 15 I _γ (973.0γ)/I _γ (2571.1γ)=6.1 2/100 4.
1005.5 [#] 1	2.4 [#] 2	2227.28	2 ⁻	1221.72	2 ⁺	[E1]	0.0002113 30	α(K)=0.0001881 26; α(L)=1.975×10 ⁻⁵ 28; α(M)=3.19×10 ⁻⁶ 4 α(N)=3.23×10 ⁻⁷ 5 %I _γ =1.05 10 I _γ (1005.5γ)/I _γ (1803.2γ)=19.1 6/100 3.
1009.0 [‡] 2	0.21 [‡] 2	2742.27	(4) ⁻	1733.26	3 ⁺			%I _γ =0.092 9
1035.5 [#] 1	0.5 [#] 1	2257.54	3 ⁻	1221.72	2 ⁺	[E1]	0.0001998 28	α(K)=0.0001778 25; α(L)=1.867×10 ⁻⁵ 26; α(M)=3.02×10 ⁻⁶ 4 α(N)=3.05×10 ⁻⁷ 4 %I _γ =0.22 5 E _γ : level-energy difference=1035.8. I _γ (1035.5γ)/I _γ (1833.6γ)=11.8 9/100 3.
1174.0 [#] 1	6.1 [#] 2	1598.07	(0) ⁺	424.05	2 ⁺	E2 ^{&}	0.000350 5	α(K)exp=0.000311 19 α(K)=0.000306 4; α(L)=3.25×10 ⁻⁵ 5; α(M)=5.26×10 ⁻⁶ 7 α(N)=5.31×10 ⁻⁷ 7; α(IPF)=5.02×10 ⁻⁶ 7 %I _γ =2.67 12
1221.6 [#] 1	7.6 [#] 5	1221.72	2 ⁺	0.0	0 ⁺			%I _γ =3.33 23 I _γ (1221.6γ)/I _γ (797.6γ)=69 4/100 3 (2005Gi17).
1222.6 [‡] 6	0.9 [‡] 5	2257.54	3 ⁻	1034.75	4 ⁺	[E1]	0.0002066 29	α(K)=0.0001311 18; α(L)=1.373×10 ⁻⁵ 19; α(M)=2.220×10 ⁻⁶ 31 α(N)=2.246×10 ⁻⁷ 32; α(IPF)=5.94×10 ⁻⁵ 9 %I _γ =0.39 22 I _γ (1222.6γ)/I _γ (1833.6γ)=26 15/100 3.
1263.2 [#] 2	2.1 [#] 1	1687.32	2 ⁺	424.05	2 ⁺	M1,E2 ^{&}	0.000308 7	α(K)exp=0.00028 3 α(K)=0.000258 5; α(L)=2.73×10 ⁻⁵ 6; α(M)=4.42×10 ⁻⁶ 9

⁷⁶Rb ε+β⁺ decay (36.5 s) [2005Gi17](#),[1985Pi08](#),[1984Mo22](#) (continued)

$\gamma(^{76}\text{Kr})$ (continued)										
E_γ	I_γ^a	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. @	$\delta^@$	α^\dagger	$I_{(\gamma+ce)}^a$	Comments
1270.1 [‡] 2	0.37 [‡] 3	3602.81	1 ⁻	2332.70	(1 ⁻)	M1,E2&		0.000306 7		$\alpha(\text{N})=4.47\times 10^{-7}$ 9; $\alpha(\text{IPF})=1.73\times 10^{-5}$ 23 %I γ =0.92 5 I γ (1263.2 γ)/I γ (917.4 γ)=21.2 7/100 6. $\alpha(\text{K})_{\text{exp}}=0.00026$ 9 $\alpha(\text{K})=0.000255$ 5; $\alpha(\text{L})=2.70\times 10^{-5}$ 6; $\alpha(\text{M})=4.37\times 10^{-6}$ 9 $\alpha(\text{N})=4.42\times 10^{-7}$ 8; $\alpha(\text{IPF})=1.86\times 10^{-5}$ 25 %I γ =0.162 14 I γ (1270.1 γ)/I γ (3178.3 γ)=4.0 3/100 12. $\alpha(\text{K})=0.0001190$ 17; $\alpha(\text{L})=1.246\times 10^{-5}$ 17; $\alpha(\text{M})=2.014\times 10^{-6}$ 28 $\alpha(\text{N})=2.039\times 10^{-7}$ 29; $\alpha(\text{IPF})=0.0001060$ 15 %I γ =0.197 31 I γ (1291.3 γ)/I γ (453.5 γ)=8.5 13/100 4. $\alpha(\text{K})_{\text{exp}}=0.00022$ 4 $\alpha(\text{K})=0.000240$ 4; $\alpha(\text{L})=2.53\times 10^{-5}$ 5; $\alpha(\text{M})=4.10\times 10^{-6}$ 8 $\alpha(\text{N})=4.15\times 10^{-7}$ 7; $\alpha(\text{IPF})=2.64\times 10^{-5}$ 34 %I γ =1.27 10 $\alpha(\text{K})_{\text{exp}}=0.00024$ 5 $\alpha(\text{K})=0.0002376$ 33; $\alpha(\text{L})=2.515\times 10^{-5}$ 35; $\alpha(\text{M})=4.07\times 10^{-6}$ 6 $\alpha(\text{N})=4.11\times 10^{-7}$ 6; $\alpha(\text{IPF})=3.27\times 10^{-5}$ 5 %I γ =0.70 5 Mult.: $\alpha(\text{K})_{\text{exp}}$ from 2005Gi17 gives M1,E2; ΔJ^π requires E2. $\alpha(\text{K})=0.0001124$ 16; $\alpha(\text{L})=1.177\times 10^{-5}$ 16; $\alpha(\text{M})=1.902\times 10^{-6}$ 27 $\alpha(\text{N})=1.926\times 10^{-7}$ 27; $\alpha(\text{IPF})=0.0001343$ 19 %I γ =0.35 13 I γ (1334.4 γ)/I γ (1680.3 γ)=7.0 3/100 3. $\alpha(\text{K})=0.0001103$ 15; $\alpha(\text{L})=1.154\times 10^{-5}$ 16; $\alpha(\text{M})=1.866\times 10^{-6}$ 26 $\alpha(\text{N})=1.889\times 10^{-7}$ 26; $\alpha(\text{IPF})=0.0001437$ 20 %I γ =0.88 5 I γ (1349.3 γ)/I γ (2571.1 γ)=2.22 7/100 4. %I γ =0.394 22 %I γ =0.17 4 I γ (1463.0 γ)/I γ (3178.3 γ)=4.2 9/100 12.
1291.3 [‡] 3	0.45 [‡] 7	3024.42	(2) ⁻	1733.26	3 ⁺	[E1]		0.0002397 34		
1309.3 [#] 1	2.9 [#] 2	1733.26	3 ⁺	424.05	2 ⁺	M1+E2&	+0.38 4	0.000296 7		
1321.6 [#] 3	1.6 [#] 1	2091.49	(2) ⁺	769.94	0 ⁺	(E2)		0.000300 4		
1334.4 [#] 3	0.8 [#] 3	2104.33	1 ⁻	769.94	0 ⁺	[E1]		0.000261 4		
1349.3 [#] 1	2.0 [#] 1	2571.01	1 ⁻	1221.72	2 ⁺	[E1]		0.000268 4		
1359.4 [‡] 1	0.90 [‡] 4	2581.11	(2) ⁺	1221.72	2 ⁺					
1463.0 [‡] 2	0.39 [‡] 8	3602.81	1 ⁻	2140.16	(1,2) ⁺					

γ(⁷⁶Kr) (continued)

E _γ	I _γ ^a	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [@]	δ [@]	α [†]	Comments
1498.4 [‡] 3	0.32 [‡] 4	3602.81	1 ⁻	2104.33	1 ⁻				%I _γ =0.140 18 I _γ (1498.4γ)/I _γ (3178.3γ)=3.4 4/100 12.
1542.6 [‡] 2	0.35 [‡] 4	3275.91	(1 ⁺ ,2)	1733.26	3 ⁺				%I _γ =0.153 18 I _γ (1542.6γ)/I _γ (2054.3γ)=35 4/100 5.
1546.1 [‡] 3	0.42 [‡] 17	2581.11	(2 ⁺)	1034.75	4 ⁺				%I _γ =0.18 8 I _γ (1546.1γ)/I _γ (1359.4γ)=47 19/100 4.
1553.2 [#] 1	1.7 [#] 1	2774.94	0 ⁺ ,1,2	1221.72	2 ⁺				%I _γ =0.74 5 I _γ (1553.2γ)/I _γ (2350.9γ)=56 3/100 4.
1567.8 [‡] 2	0.84 [‡] 5	3672.24	(0,1,2)	2104.33	1 ⁻				%I _γ =0.368 25
1665.6 [‡] 5	0.30 [‡] 5	2700.16	2 ⁺	1034.75	4 ⁺	[E2]		0.000321 5	α(K)=0.0001491 21; α(L)=1.570×10 ⁻⁵ 22; α(M)=2.54×10 ⁻⁶ 4 α(N)=2.57×10 ⁻⁷ 4; α(IPF)=0.0001539 22 %I _γ =0.131 22 I _γ (1665.6γ)/I _γ (2276.6γ)=25 4/100 5.
1667.6 [#] 3	0.8 [#] 2	2091.49	(2) ⁺	424.05	2 ⁺				%I _γ =0.35 9 I _γ (1667.6γ)/I _γ (1321.6γ)=78.7 6/100 3.
1680.3 [#] 2	12.8 [#] 6	2104.33	1 ⁻	424.05	2 ⁺	E1&		0.000478 7	α(K)exp=0.000056 13 α(K)=7.68×10 ⁻⁵ 11; α(L)=8.01×10 ⁻⁶ 11; α(M)=1.295×10 ⁻⁶ 18 α(N)=1.312×10 ⁻⁷ 18; α(IPF)=0.000391 5 %I _γ =5.61 32
1687.1 [#] 2	3.2 [#] 2	1687.32	2 ⁺	0.0	0 ⁺	[E2]		0.000327 5	α(K)=0.0001454 20; α(L)=1.531×10 ⁻⁵ 21; α(M)=2.476×10 ⁻⁶ 35 α(N)=2.506×10 ⁻⁷ 35; α(IPF)=0.0001633 23 %I _γ =1.40 10 I _γ (1687.1γ)/I _γ (917.4γ)=28.8 10/100 6.
1718.6 [‡] 4	2.7 [‡] 1	4289.42	(0,1,2) ⁻	2571.01	1 ⁻	M1,E2&		0.000319 16	%I _γ =1.18 6 α(K)exp=0.00016 6 α(K)=0.0001401 20; α(L)=1.472×10 ⁻⁵ 21; α(M)=2.381×10 ⁻⁶ 34 α(N)=2.413×10 ⁻⁷ 34; α(IPF)=0.000162 15 E _γ =1718.3 3, I _γ =3.1 6; unplaced (1984Mo22). %I _γ =0.469 30
1768.4 [‡] 2	1.07 [‡] 6	2192.50		424.05	2 ⁺				%I _γ =0.469 30
1803.2 [#] 1	12.7 [#] 8	2227.28	2 ⁻	424.05	2 ⁺	E1(+M2)	0.33 +18-33	0.000540 23	α(K)exp=0.000088 18 α(K)=8.6×10 ⁻⁵ 19; α(L)=9.0×10 ⁻⁶ 20; α(M)=1.45×10 ⁻⁶ 32 α(N)=1.47×10 ⁻⁷ 33; α(IPF)=0.00044 4 %I _γ =5.6 4

γ(⁷⁶Kr) (continued)

E _γ	I _γ ^a	E _i (level)	J _i ^π	E _f	J _f ^π	Mult. [@]	δ [@]	α [†]	Comments
1833.6 [#] 1	3.5 [#] 3	2257.54	3 ⁻	424.05	2 ⁺	E1(+M2)	0.12 +28-12	0.000577 29	α(K)exp=0.000071 21 α(K)=6.9×10 ⁻⁵ 21; α(L)=7.2×10 ⁻⁶ 22; α(M)=1.17×10 ⁻⁶ 35 α(N)=1.2×10 ⁻⁷ 4; α(IPF)=0.00050 5 %I _γ =1.53 14
1908.5 [‡] 2	0.65 [‡] 3	2332.70	(1 ⁻)	424.05	2 ⁺				%I _γ =0.285 16
2046.5 [‡] 2	0.81 [‡] 6	2816.57	(1,2 ⁺)	769.94	0 ⁺				%I _γ =0.355 29 I _γ (2046.5γ)/I _γ (2392.8γ)=30 2/100 3.
2054.3 [‡] 5	1.00 [‡] 5	3275.91	(1 ⁺ ,2)	1221.72	2 ⁺				%I _γ =0.438 26
2104.3 [#] 5	2.9 [#] 3	2104.33	1 ⁻	0.0	0 ⁺	[E1]		0.000761 11	α(K)=5.43×10 ⁻⁵ 8; α(L)=5.66×10 ⁻⁶ 8; α(M)=9.14×10 ⁻⁷ 13 α(N)=9.27×10 ⁻⁸ 13; α(IPF)=0.000700 10 %I _γ =1.27 14 I _γ (2104.3γ)/I _γ (1680.3γ)=16.0 5/100 3.
2140.5 [‡] 2	0.31 [‡] 3	2140.16	(1,2 ⁺)	0.0	0 ⁺				%I _γ =0.136 14 I _γ (2140.5γ)/I _γ (918.5γ)=26 3/100 33.
2147.2 [#] 3	1.0 [#] 1	2571.01	1 ⁻	424.05	2 ⁺	[E1]		0.000788 11	α(K)=5.27×10 ⁻⁵ 7; α(L)=5.49×10 ⁻⁶ 8; α(M)=8.87×10 ⁻⁷ 12 α(N)=8.99×10 ⁻⁸ 13; α(IPF)=0.000729 10 %I _γ =0.44 5 I _γ (2147.2γ)/I _γ (2571.1γ)=1.39 7/100 4.
2185.0 [‡] 3	1.5 [‡] 1	4289.42	(0,1,2) ⁻	2104.33	1 ⁻				%I _γ =0.66 5 I _γ (2185.0γ)/I _γ (1718.6γ)=55 3/100 4.
2276.6 [‡] 4	1.20 [‡] 6	2700.16	2 ⁺	424.05	2 ⁺				%I _γ =0.526 31
2333.2 [‡] 4	0.20 [‡] 5	2332.70	(1 ⁻)	0.0	0 ⁺				%I _γ =0.088 22 I _γ (2333.2γ)/I _γ (1908.5γ)=31 8/100 5.
2350.9 [#] 4	4.4 [#] 6	2774.94	0 ⁺ ,1,2	424.05	2 ⁺				%I _γ =1.93 27
2392.8 [#] 4	4.8 [#] 6	2816.57	(1,2 ⁺)	424.05	2 ⁺				%I _γ =2.10 27
2546.0 [‡] 3	1.13 [‡] 7	2970.1	(0 ⁺ ,1,2)	424.05	2 ⁺				%I _γ =0.495 34
2571.1 [#] 2	104 [#] 4	2571.01	1 ⁻	0.0	0 ⁺	[E1]		1.04×10 ⁻³ 2	α(K)=4.07×10 ⁻⁵ 6; α(L)=4.23×10 ⁻⁶ 6; α(M)=6.83×10 ⁻⁷ 10 α(N)=6.93×10 ⁻⁸ 10; α(IPF)=0.000999 14 %I _γ =45.5 13
2600.2 [#] 4	6.8 [#] 8	3024.42	(2) ⁻	424.05	2 ⁺	[E1]		1.06×10 ⁻³ 2	α(K)=4.00×10 ⁻⁵ 6; α(L)=4.16×10 ⁻⁶ 6; α(M)=6.72×10 ⁻⁷ 9 α(N)=6.82×10 ⁻⁸ 10; α(IPF)=0.001016 14 %I _γ =3.0 4 I _γ (2600.2γ)/I _γ (453.5γ)=61 2/100 4.

γ(⁷⁶Kr) (continued)

<u>E_γ</u>	<u>I_γ^a</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>	<u>Mult.[@]</u>	<u>α[†]</u>	<u>Comments</u>
2805.5 ^{±3}	0.60 ^{±5}	4026.72	1,2 ⁽⁺⁾	1221.72	2 ⁺			%I _γ =0.263 24 I _γ (2805.5γ)/I _γ (3602.2γ)=32 3/100 24.
2816.6 4	<2.7	2816.57	(1,2 ⁺)	0.0	0 ⁺			%I _γ =0.6 6 I _γ : from branching ratio in 2005Gi17. Other: 8.1 9 in Adopted Levels, Gammas dataset. I _γ (2816.6γ)/I _γ (2392.8γ)=<56/100 3.
2817.3 ^{±9}	2.1 ^{±6}	3242.1	(1,2 ⁺)	424.05	2 ⁺			%I _γ =0.92 27
2997.5 ^{±5}	0.69 ^{±5}	3421.6	(0 ⁺ ,1,2)	424.05	2 ⁺			%I _γ =0.302 24
3178.3 ^{±2}	9.4 ^{±11}	3602.81	1 ⁻	424.05	2 ⁺	[E1]	1.35×10 ⁻³ 2	α(K)=3.04×10 ⁻⁵ 4; α(L)=3.16×10 ⁻⁶ 4; α(M)=5.10×10 ⁻⁷ 7 α(N)=5.18×10 ⁻⁸ 7; α(IPF)=0.001313 18 %I _γ =4.1 5
3214.2 ^{±14}	1.7 ^{±4}	3636.3	1,2 ⁽⁺⁾	424.05	2 ⁺			%I _γ =0.74 18
3216.3 ^{±4}	1.2 ^{±2}	3986.6	1,2 ⁽⁺⁾	769.94	0 ⁺			%I _γ =0.53 9
3242.3 ^{±3}	1.2 ^{±2}	3242.1	(1,2 ⁺)	0.0	0 ⁺			%I _γ =0.53 9 I _γ (3242.3γ)/I _γ (2817.3γ)=57 9/100 29.
3257.4 ^{±5}	0.46 ^{±15}	4026.72	1,2 ⁽⁺⁾	769.94	0 ⁺			%I _γ =0.20 7 I _γ (3257.4γ)/I _γ (3602.2γ)=27 9/100 24.
3327.6 ^{±5}	0.29 ^{±8}	4097.74	1,2 ⁽⁺⁾	769.94	0 ⁺			%I _γ =0.13 4 I _γ (3327.6γ)/I _γ (3673.6γ)=13 4/100 11.
3553.6 ^{±4}	0.97 ^{±16}	3978.0	1,2 ⁽⁺⁾	424.05	2 ⁺			%I _γ =0.43 7
3562.7 ^{±4}	1.1 ^{±2}	3986.6	1,2 ⁽⁺⁾	424.05	2 ⁺			%I _γ =0.48 9 I _γ (3562.7γ)/I _γ (3216.3γ)=93 14/100 16.
3602.2 ^{±2}	1.7 ^{±4}	4026.72	1,2 ⁽⁺⁾	424.05	2 ⁺			%I _γ =0.74 18
3602.8 ^{±10}	3.4 ^{±7}	3602.81	1 ⁻	0.0	0 ⁺	E1	1.54×10 ⁻³ 2	α(K)=2.58×10 ⁻⁵ 4; α(L)=2.67×10 ⁻⁶ 4; α(M)=4.32×10 ⁻⁷ 6 α(N)=4.38×10 ⁻⁸ 6; α(IPF)=0.001512 21 %I _γ =1.49 31 I _γ (3602.8γ)/I _γ (3178.3γ)=36 7/100 12.
3636.1 ^{±3}	0.75 ^{±14}	3636.3	1,2 ⁽⁺⁾	0.0	0 ⁺			%I _γ =0.33 6 I _γ (3636.1γ)/I _γ (3214.2γ)=44 8/100 23.
3673.6 ^{±2}	2.2 ^{±2}	4097.74	1,2 ⁽⁺⁾	424.05	2 ⁺			%I _γ =0.96 9
3978.2 ^{±4}	0.9 ^{±4}	3978.0	1,2 ⁽⁺⁾	0.0	0 ⁺			%I _γ =0.39 18 I _γ (3978.2γ)/I _γ (3553.6γ)=93 14/100 17.
4026.8 ^{±6}	0.86 ^{±16}	4026.72	1,2 ⁽⁺⁾	0.0	0 ⁺			%I _γ =0.38 7 I _γ (4026.8γ)/I _γ (3602.2γ)=51 9/100 24.
4098.8 ^{±17}	1.00 ^{±17}	4097.74	1,2 ⁽⁺⁾	0.0	0 ⁺			%I _γ =0.44 8 I _γ (4098.8γ)/I _γ (3673.6γ)=46 8/100 11.

⁷⁶Rb $\epsilon+\beta^+$ decay (36.5 s) 2005Gi17,1985Pi08,1984Mo22 (continued)

$\gamma(^{76}\text{Kr})$ (continued)

† Additional information 2.

‡ From 2005Gi17, new transition reported.

From weighted average of values from 1984Mo22 and 1985Pi08, except that 2350.9, 2392.8, 2816.6 and 2600.2 γ rays were reported only by 1984Mo22. These are confirmed in 2005Gi17. 2005Gi17 quote E_γ values listed without uncertainties from 1995-NDS (1995Si03). The I_γ values have been adjusted here to 100 for 424.0 γ . Branching ratios, determined independently by 2005Gi17 from $\gamma\gamma$ data, are listed under comments, and used in Adopted dataset.

@ From Adopted Gammas, unless otherwise stated. The ce data in this decay are also used to assign multipolarities and mixing ratios.

& Assigned by evaluators from $\alpha(\text{K})_{\text{exp}}$ value of 2005Gi17.

^a For absolute intensity per 100 decays, multiply by 0.438 14.

^b Placement of transition in the level scheme is uncertain.

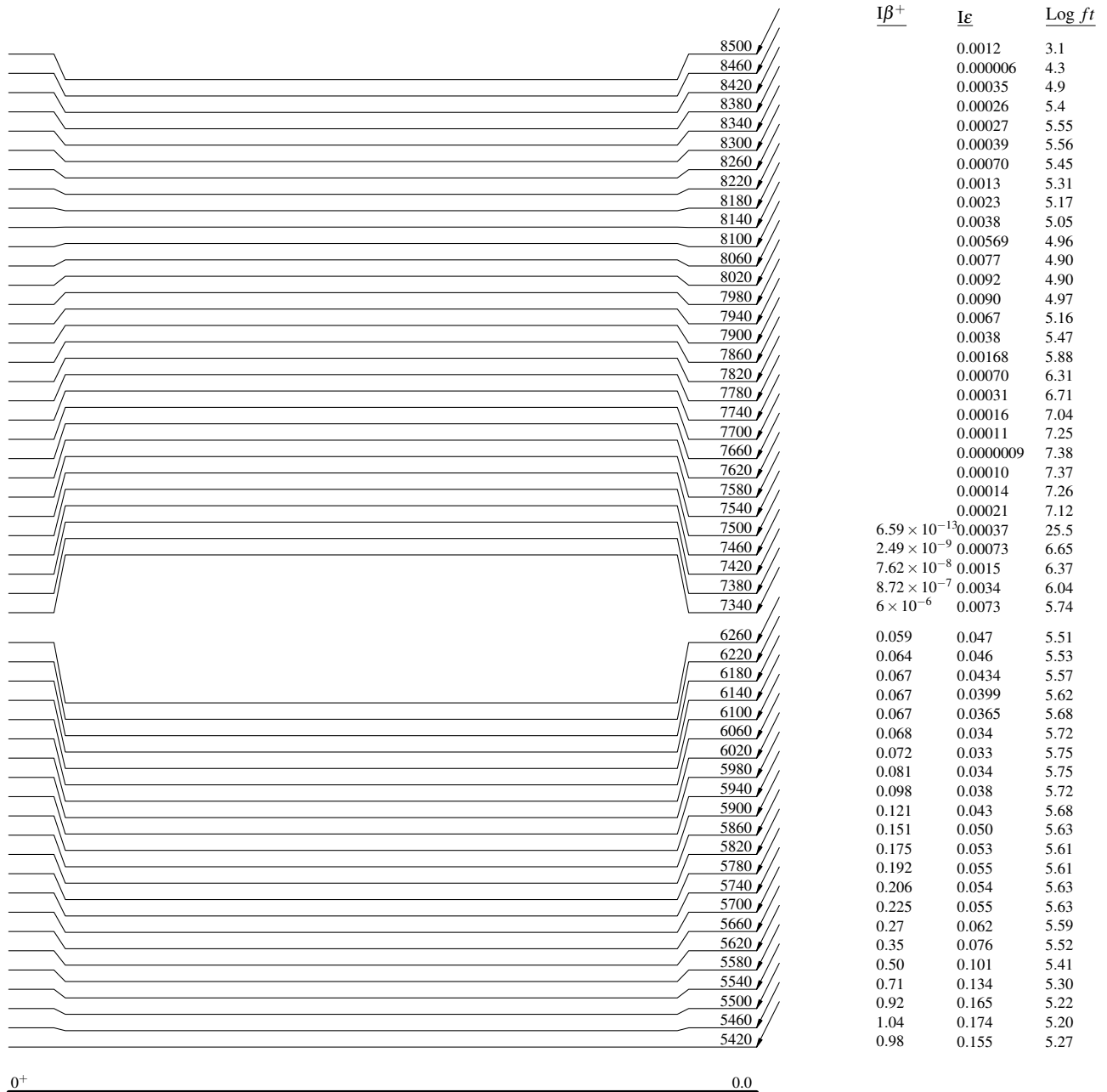
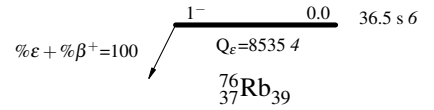
^{76}Rb $\epsilon+\beta^+$ decay (36.5 s) 2005Gi17,1985Pi08,1984Mo22

Decay Scheme

Legend

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

- $I_{\gamma} < 2\% \times I_{\gamma}^{\text{max}}$
- $I_{\gamma} < 10\% \times I_{\gamma}^{\text{max}}$
- $I_{\gamma} > 10\% \times I_{\gamma}^{\text{max}}$



$^{76}\text{Kr}_{40}$

^{76}Rb $\epsilon + \beta^+$ decay (36.5 s) 2005Gi17,1985Pi08,1984Mo22

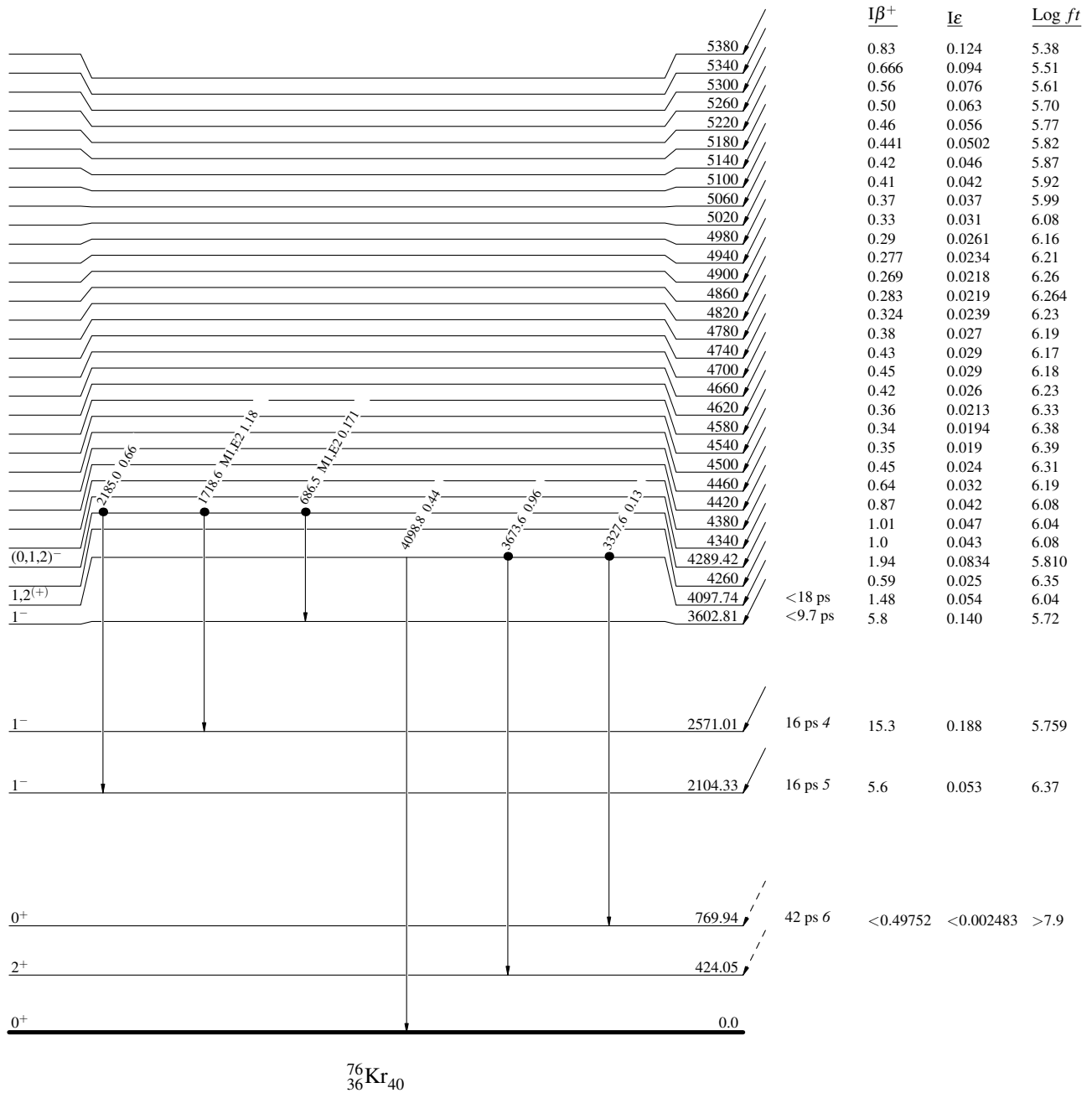
Decay Scheme (continued)

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

Legend

- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- Coincidence

$^{76}\text{Rb}_{39}$ 1^- 0.0 36.5 s 6
 $Q_\epsilon = 8535.4$
 $\% \epsilon + \% \beta^+ = 100$



$^{76}\text{Kr}_{40}$

⁷⁶Rb ε+β⁺ decay (36.5 s) 2005Gi17,1985Pi08,1984Mo22

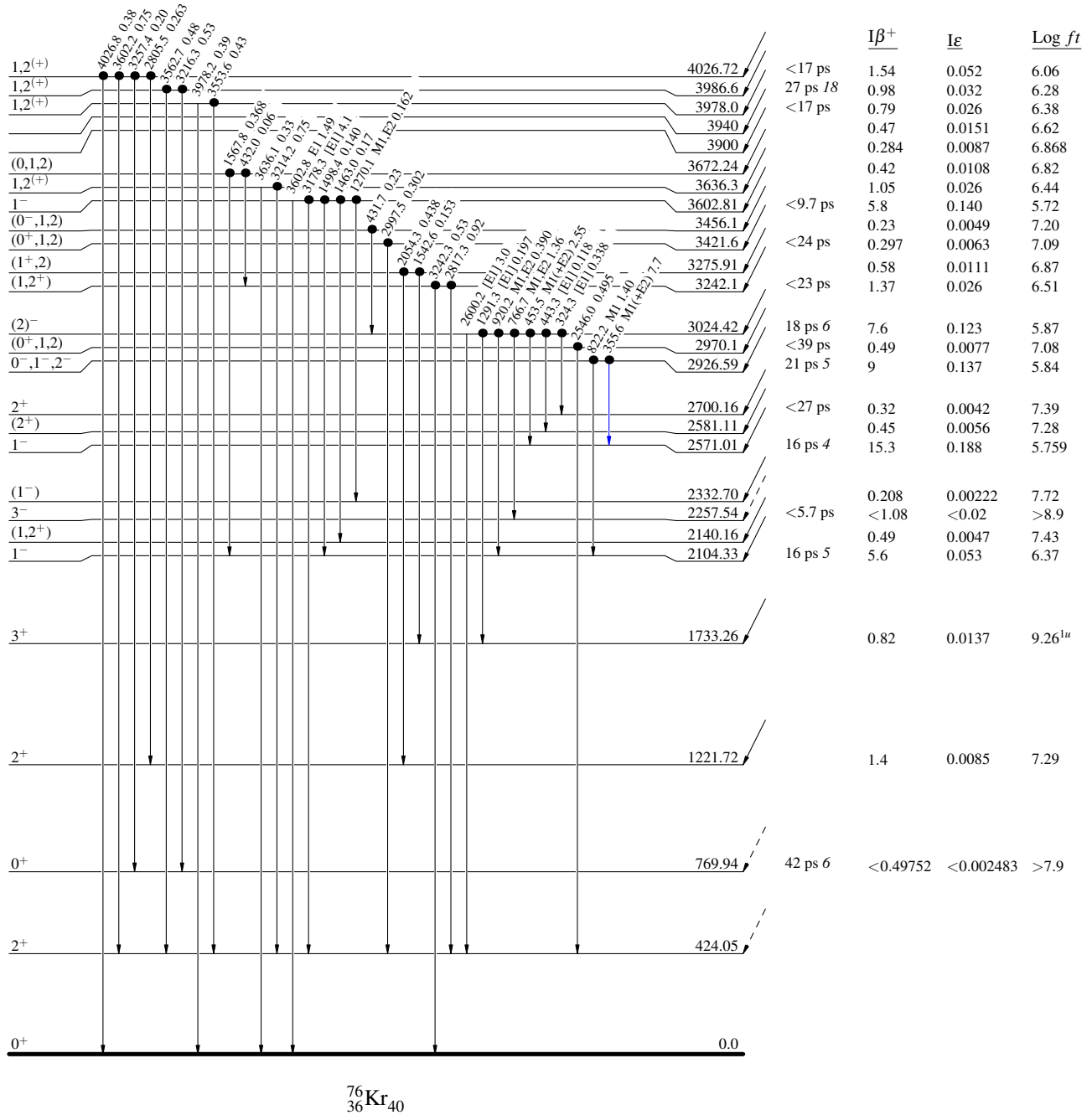
Decay Scheme (continued)

Legend

Intensities: I_(γ+ce) per 100 parent decays

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}
- Coincidence

1⁻ 0.0 36.5 s 6
 Q_ε=8535.4
⁷⁶Rb₃₇



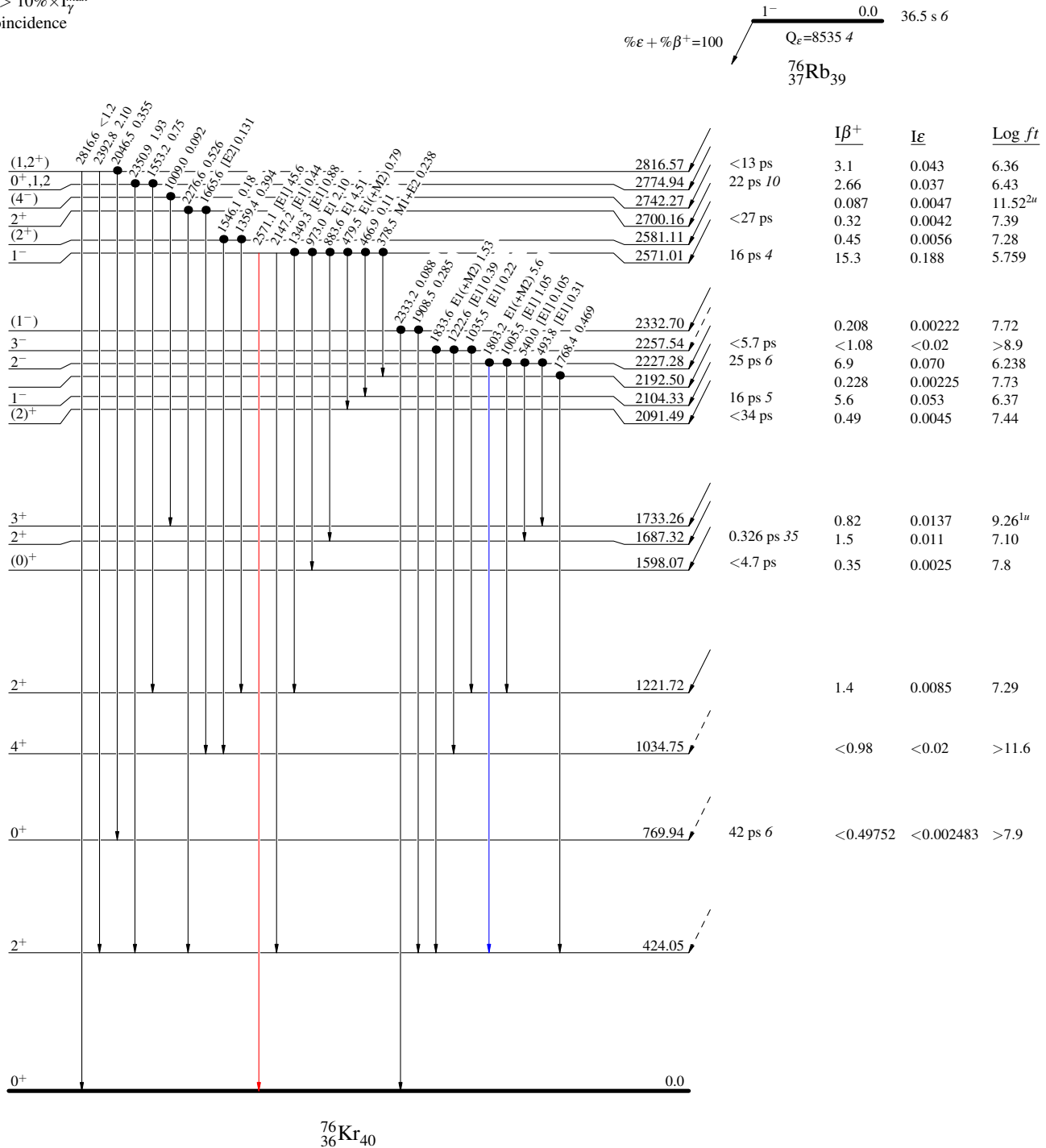
^{76}Rb $\varepsilon+\beta^+$ decay (36.5 s) 2005Gi17,1985Pi08,1984Mo22

Decay Scheme (continued)

Legend

- $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- $I_\gamma > 10\% \times I_\gamma^{\text{max}}$
- Coincidence

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



^{76}Rb $\varepsilon+\beta^+$ decay (36.5 s) 2005Gi17,1985Pi08,1984Mo22

Legend

- $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
- $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
- $I_\gamma > 10\% \times I_\gamma^{\text{max}}$
- - - γ Decay (Uncertain)
- Coincidence

Decay Scheme (continued)

Intensities: $I(\gamma+ce)$ per 100 parent decays

