^{208}Pb(n,n′γ)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	M. J. Martin	NDS 108,1583 (2007)	1-Jun-2007

1977Di12 E=4.9-8.0 MeV.
1979Co02 E=5.2-8.5 MeV.
1990Go33 E=reactor fast neutrons.
1995Hl01 E=14.7 MeV. Measured σ only.
1996Ye01 E<5 MeV from ^{3}H(p,n). E>5 MeV from ^{2}H(d,n).
1998Ye02 E: see 1996Ye01.
2005YaZW E: see 1996Ye01.
Others:1971De46, 1971Fr05, 1974Ne07.

^{208}Pb Levels

E(level)†	Jπ‡	$T_{1/2}$#	Comments
0	0^+		
2614.524 *10*	3^-	>690 fs	
3197.713 *10*	5^-	>690 fs	
3475.077 *11*	4^-	>690 fs	
3708.472 *12*	5^-	>690 fs	
3919.971 *13*	6^-	>690 fs	
3946.581 *14*	4^-	>430 fs	
3961.172 *13*	5^-	>470 fs	
3995.440 *13*	4^-	>690 fs	
4037.447 *14*	7^-	>690 fs	
4051.136 *14*	3^-	326 fs *+28−21*	
4085.58 *6*	2^+	<9 fs	Jπ: J=2 from γ(θ) (1979Co02).
4125.348 *12*	5^-	>490 fs	
4180.416 *14*	5^-	319 fs *35*	
4206.281 *14*	6^-	>690 fs	
4229.581 *17*	2^-	333 fs *28*	Jπ: J=2 from γ(θ) (1979Co02).
4254.788 *18*	3^-	97 fs *7*	
4261.914 *12*	4^-	>520 fs	
4296.577 *13*	5^-	201 fs *+49−35*	
4323.947 *15*	4^+	>690 fs	
4358.670 *13*	4^-	194 fs *21*	
4383.288 *17*	6^-	>690 fs	
4423.654 *15*	6^+	>110 fs	
4480.749 *16*	6^-	97 fs *7*	
4610.750 *16*	8^+	>690 fs	
4680.271 *22*	7^-	>690 fs	
4698.318 *18*	3^-	139 fs *+42−28*	
4708.725 *21*	5^-	0.24 ps *+20−9*	
4711.819 *21*	4^-	>340 fs	
4761.958 *23*	6^-	0.26 ps *+18−9*	
4841.55 *10*	1^-	<9 fs	Jπ: J=1 from γ(θ) (1979Co02).
4860.87 *6*	8^+	>22 fs	
4867.92 *4*	7^+	>97 fs	
4868.41 *6*	0^+	>312 fs	
4911.345 *20*	4	215 fs *+63−42*	
4937.19 *4*	3^-	17.3 fs *+35−28*	
4953.303 *17*	3^-	33.3 fs *14*	
4962.429 *21*	$4^{(-)},5^{(+)}$	>440 fs	
4973.918 *20*	3^-	166 fs *21*	
5037.551 *17*	3^-	90 fs *7*	

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^{208}Pb(n,n′γ) (continued)

^{208}Pb Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$[#]	Comments
5074.807[@] *25*		69 fs *+13–10*	
5075.5[@] *10*			
5079.915 *20*	6^-	111 fs *+28–21*	
5085.473 *25*	7^-	>229 fs	
5092.99 *3*	8^+	>690 fs	
5127.360 *16*	2^-,3^-	64 fs *3*	
5193.435 *25*	5^+	>319 fs	
5195.056 *23*	3^-,4^-	187 fs *+42–35*	
5195.38 *15*	7^+	>690 fs	
5213.013 *22*	$(6)^+$	76 fs *+21–14*	
5214.00 *3*	(5^-)	14 fs *3*	
5216.216 *18*	4^+	32 fs *3*	
5239.7? *5*			
5241.0 *4*	0^+	>690 fs	Jπ: Jπ=0^+ established by 1996Ye01 on the basis of σ(E) and the isotropy of the 2626.6γ. The authors propose that this state is the lowest-spin member of the expected quartet of two-phonon octupole states At an energy about twice that of the 3^- 2614 state. This is the same state As that seen In (d,pγ) and (p,p′γ) At 5241 *2*. In those reactions, only the E0 branch to the g.s. is seen. This g.s. branch is not seen here since only gammas were studied.
5245.252 *22*	3^-	17 fs *+7–6*	
5254.02? *7*			E(level): proposed by the evaluator on the basis of data from (d,pγ) and (x,x′γ). In both reactions, the level is defined by a deexciting 1779γ. The 1778.94γ, seen but unplaced by 2005YaZW, May Be the corresponding transition In (n,n′γ).
5276.426 *24*	4^-	44 fs *+6–5*	
5280.49 *3*	0^-	>319 fs	
5286.486 *17*	$2,3^-$	76 fs *7*	
5291.81 *13*	1^-	<2.1 fs	Jπ: J=1 from γ(θ) (1979Co02).
5317.042 *18*	(3^+)	>690 fs	
5339.48 *6*	8^+	32 fs *+37–18*	
5347.273 *18*	3^-	28.4 fs *14*	
5382.83 *3*		37 fs *+7–6*	
5384.58 *3*	3^-	76 fs *14*	
5481.88 *3*	5^-	90 fs *14*	
5491.54 *3*		125 fs *+35–21*	E(level): see Adopted Levels for proposed doublet.
5511.78 *14*	1^-	<3.5 fs	Jπ: J=1 from γ(θ) (1979Co02).
5516.716 *23*	3^-	40.9 fs *21*	
5545.50 *3*	(5^-)	37 fs *+8–6*	
5548.115 *23*	2^-	83 fs *7*	
5561.31 *5*	2^+	38 fs *4*	
5563.73 *4*	3^-	44 fs *+9–7*	
5599.46 *5*	0^-	>159 fs	
5639.55 *9*	1^-	0.13 ps *+12–5*	Jπ: J=1 or 2 for E=5640.5 *10* from γ(θ) (1979Co02).
5641.98 *20*	$1,2^+$	<5.5 fs	Jπ: J=1 or 2 for E=5640.5 *10* from γ(θ) (1979Co02).
5648.99 *6*	3^-,4^-	37 fs *+13–10*	
5658.52 *4*	5^-	31 fs *+7–6*	
5675.369 *23*	2^-,3,4	13 fs *+6–5*	
5688?[&]	6^-		
5690.119 *23*	4^+	46 fs *4*	
5694.23 *12*	7^-	58 fs *+84–30*	
5715.51 *9*	2^+	4.8 fs *9*	
5721.52 *4*	7^-	28 fs *+9–7*	
5777.98 *4*	2^-,3^-	15.9 fs *14*	
5783.22 *7*		41 fs *+22–14*	
5789.34 *4*	2^+,3^+,4^+	40 fs *+4–3*	

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^{208}Pb(n,n′γ) (continued)

^{208}Pb Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$[#]	Comments
5799.41 *9*		>690 fs	
5805.0 *3*	1	5.1 fs *+11−10*	Jπ: J=1 from γ(θ) (1979Co02).
5813.27 *5*	3−	22 fs *+4−3*	
5819.49 *20*	1+,2+	222 fs *+42−35*	
5844.39 *20*	1+	<2.1 fs	
5873.572 *23*	3−	13.2 fs *+21−14*	
5885.55 *4*	3−	13.9 fs *14*	
5918.28 *4*	3−,4,5−	173 fs *+56−42*	
5923.75 *3*	2−	104 fs *+90−42*	
5946.59 *20*	1−	<1.4 fs	Jπ: J=1 from γ(θ) (1979Co02).
5968.53 *8*	4−	7.6 fs *+42−35*	
6009.77 *3*	3−	11 fs *+5−4*	
6011.64 *6*		57 fs *+13−11*	
6086.19 *8*	1−	37 fs *+25−15*	
6101.1 *10*	(5+)	>690 fs	
6147.9? *8*			
6243.32? *8*			
6255.67? *6*	2+		
6274.96 *20*	3−	12 fs *+16−10*	

[†] From a least-squares fit to the E(γ) data.
[‡] Spin and parity values are those given In Adopted Levels. Values determined from this experiment are given In comments.
[#] From 2005YaZW based on Doppler-shift attenuation method. These data supersede those of 1998Ye02.
[@] 2005YaZW propose a level At 5075 deexcited by transitions with energies 868, 894, 1113, and 1366. In (d,pγ) there is a level proposed At 5075 with a single deexciting transition with energy 1367. The branchings In (n,n′γ) are such that the other transitions would have been observed. The evaluator assumes that there are two levels At this energy, the 5075.5 level, deexcited by the 1367γ, corresponding to the level In (d,pγ), and the 5074.803 level, seen only In (n,n′γ). The evaluator takes Eγ(1367γ) from (d,pγ) since the transition May Be a doublet, with placement also from the 5492 level. See comment on that level In Adopted Levels.
[&] On the basis of data In (d,pγ), the evaluator introduces a level At 5688. In (d,pγ), a 5687 level is shown deexciting via transitions with energies 1561.0 *10*, 1726.0 *10*, and 1767.9 *10*. 2005YaZW show unplaced transitions with energies 1728.7 *2* and 1767.4 *10* with an intensity ratio consistent with that In (d,pγ). If one includes 50% of the 1561γ, placed entirely from the 5037 level by 2005YaZW, then the branching of this transition from both levels agrees well with (d,pγ). See comment on the 1561γ from the 5037 level. Note, however, that the excitation energies deduced from the 1728.7 and 1767.4 transitions are somewhat inconsistent. The energy for this placement of the 1561γ is from (d,pγ).

γ(^{208}Pb)

Eγ[†]	Iγ[‡]	Ei(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[@]	Comments
[x]185.90 *12*	0.032 *9*							
211.51 *2*	1.3 *3*	3919.971	6−	3708.472	5−	M1(+E2)	+0.04 *+7−6*	Iγ: Iγ/Iγ(722γ)=0.80 *6* (1990Go33). Mult.: from Adopted Gammas. δ: the large solution is ruled out by ce data In β− decay.
232.12[b] *6*	0.021[b] *5*	5092.99	8+	4860.87	8+			Additional information 16.
233.32[b] *7*	0.19[b] *5*	3708.472	5−	3475.077	4−			
238.22 *3*	0.54 *13*	3946.581	4−	3708.472	5−	[D(+Q)]	+0.05 *14*	Mult.: the large solution is <−5.2, >+10, an unlikely alternative. Other: −0.06 *6* (1990Go33).

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

E_γ [†]	I_γ [‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	δ [@]	Comments
250.14 *7*	0.26 *7*	4860.87	8^+	4610.750	8^+			
252.755 *12*	1.4 *3*	3961.172	5^-	3708.472	5^-	M1+E2	−0.35 *10*	I_γ: Iγ:Iγ(763γ)=39 *4*:100 *3* (1990Go33). Mult.: from Adopted Gammas. δ: the large solution is ruled out by ce data In β^- decay.
257.06 *5*	0.21 *5*	4867.92	7^+	4610.750	8^+			
[x]273.85 *13*	0.014 *5*							
277.371 *5*	3.3 *8*	3475.077	4^-	3197.713	5^-	M1+E2	+0.052 *43*	Mult.: from Adopted Gammas. E_γ: from Eγ(860γ)= Eγ(277γ)+Eγ(583γ). The authors report 277.368 *10*. I_γ: Iγ/Iγ(860γ)=0.61 *4* (1990Go33). δ: the large solution is ruled out by ce data In β^- decay. Other: +0.038 *20* (1990Go33).
[x]283.7 *4*	0.006 *3*							
[x]286.82 *12*	0.017 *5*							
[x]297.61 *9*	0.027 *7*							
[x]318.0 *3*	0.012 *5*							
[x]326.17 *9*	0.17 *4*							
327.44 *20*	0.030 *4*	5195.38	7^+	4867.92	7^+			E_γ,I_γ: Eγ is from (d,pγ) and Iγ is from Iγ/Iγ(771γ)=0.189 *35* In (d,pγ). The 327γ is not reported In (n,n′γ), but would perhaps Be unresolved from the unplaced 326.17γ with Iγ=0.17 *4*.
[x]353.01 *11*	0.07 *2*							
362.785[g] *13*	0.52[g] *11*	4323.947	4^+	3961.172	5^-			I_γ: Iγ:Iγ(1126γ)=16.2 *16*:100 *3* (1990Go33). Additional information 2.
363.235[g] *11*	0.13[g] *3*	4358.670	4^-	3995.440	4^-			Additional information 3.
[x]365.3 *2*	0.014 *4*							
[x]377.17 *14*	0.027 *7*							
386.3[m] *10*	0.046[m] *10*	4867.92	7^+	4480.749	6^-	[D+Q]		δ: +0.13 *+5−6* or +11 *+20−4*.
[x]392.5 *3*	0.022 *7*							
[x]395.0 *4*	0.013 *5*							
[x]396.5 *2*	0.33 *8*							
412.17 *4*	0.14 *3*	4708.725	5^-	4296.577	5^-			
416.79 *6*	0.11 *2*	4125.348	5^-	3708.472	5^-	[D(+Q)]	+0.1 *+8−4*	
[x]430.8 *2*	0.026 *12*							
436.41 *10*	0.053 *12*	4698.318	3^-	4261.914	4^-			
438.90 *14*	0.055 *13*	5280.49	0^-	4841.55	1^-			
443.536[k] *21*	0.35[k] *8*	4698.318	3^-	4254.788	3^-	[D+Q]	−0.13 *+16−14*	Additional information 6.
444.28[k] *4*	0.12[k] *3*	4867.92	7^+	4423.654	6^+			Additional information 10.
[x]449.70 *8*	0.08 *2*							
463.322[h] *15*	0.058[h] *12*	4383.288	6^-	3919.971	6^-	[D+Q]	−0.69 *+15−19*	Additional information 4.
[x]465.3 *2*	0.043 *14*							
471.498 *14*	0.54 *11*	3946.581	4^-	3475.077	4^-	[D+Q]		δ: −0.06 *+17−14* or +0.9 *+3−12*.
473.98 *5*	0.18 *4*	4680.271	7^-	4206.281	6^-	[D+Q]		δ: +0.27 *+10−9* or +5.2 *+43−19*.

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

E_γ [†]	I_γ [‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[@]	Comments
478.55 *13*	0.09 *2*	5339.48	8^+	4860.87	8^+			I_γ: see comment In Adopted Gammas on branching from the 5339 level.
482.24 *2*	0.26 *5*	5092.99	8^+	4610.750	8^+			
484.64[f] *4*	0.020[f] *5*	4867.92	7^+	4383.288	6^-			Additional information 11.
485.95[f] *15*	0.060[f] *15*	3961.172	5^-	3475.077	4^-			
497.90 *4*	0.37 *7*	4206.281	6^-	3708.472	5^-	[D+Q]		δ: +0.03 *10* or −9 *+4−85*.
[x]505.58 *3*	0.63 *12*							
510.72[d] *6*	15[d] *3*	3708.472	5^-	3197.713	5^-	M1+E2	−0.52 *+5−7*	Mult.: from Adopted Gammas.
[x]531.25 *4*	0.10 *2*							
[x]548.8 *2*	0.029 *7*							
553.414 *8*	0.69 *12*	4261.914	4^-	3708.472	5^-	[D+Q]		I_γ: Iγ:Iγ(1647γ)=62 *9*:100 *4* (1990Go33). δ: +0.03 *4* or −15 *+5−32*. Other: +0.02 *6* (1990Go33).
555.63 *6*	0.09 *2*	4761.958	6^-	4206.281	6^-			
573.38 *12*	0.058 *13*	4610.750	8^+	4037.447	7^-	[D(+Q)]		δ: +0.15 *+30−26*.
576.057 *13*	0.48 *9*	4051.136	3^-	3475.077	4^-			I_γ: Iγ/Iγ(1437γ)=0.091 *14* (1990Go33).
[x]579.53 *8*	0.13 *3*							
583.187[ot] *2*	57[o] *10*	3197.713	5^-	2614.524	3^-			
584.62[o] *15*	0.057[o] *10*	5195.38	7^+	4610.750	8^+			Additional information 19.
[x]585.25 *13*	0.20 *5*							
588.096 *6*	1.1 *2*	4296.577	5^-	3708.472	5^-	[D+Q]	−0.18 *+9−8*	δ: other: −0.02 *18* or +0.8 *+3−6* (1990Go33).
[x]603.4 *5*	0.030 *12*							
[x]608.44[&] *13*	0.019 *3*							
[x]610.60 *7*	0.066 *13*							
[x]632.8 *4*	0.015 *7*							
636.57 *3*	0.15 *3*	4761.958	6^-	4125.348	5^-			
638.48 *2*	0.23 *4*	4962.429	$4^{(-)},5^{(+)}$	4323.947	4^+			
647.25 *9*	0.041 *8*	4698.318	3^-	4051.136	3^-			
650.207 *14*	0.69 *12*	4125.348	5^-	3475.077	4^-	[D+Q]		I_γ: Iγ:Iγ(928γ)=25.3 *13*:100.0 *25* (1990Go33). δ: −0.05 *3* or −5.5 *+8−12*. Other: −0.04 *4* or −6.0 *+18−11* (1990Go33).
[x]656.72 *8*	0.061 *11*							
[x]660.76 *4*	0.079 *14*							
678.7 *2*	0.030 *7*	5923.75	2^-	5245.252	3^-			
[x]692.85 *9*	0.14 *2*							
[x]693.6 *3*	0.09 *2*							
[x]694.96 *8*	0.16 *3*							
[x]696.85 *8*	0.20 *3*							
[x]699.60 *11*	0.12 *2*							
702.18[v] *3*	0.043[v] *15*	5085.473	7^-	4383.288	6^-			Additional information 15.
702.885[v] *17*	0.038[v] *5*	4698.318	3^-	3995.440	4^-			Additional information 7.
705.33 *2*	0.38 *6*	4180.416	5^-	3475.077	4^-	[D+Q]		I_γ: Iγ/Iγ(983γ)=0.086 *11* (1990Go33). δ: −0.04 *7* or −6.3 =16-37.
[x]708.5 *3*	0.11 *2*							

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

E_γ [†]	I_γ [‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[@]	Comments
[x]713.22 *8*	0.080 *14*							
715.23 *2*	0.31 *5*	4423.654	6^+	3708.472	5^-	[D(+Q)]	−0.05 *7*	I_γ: Iγ/Iγ(1226γ)=0.094 *15* (1990Go33).
719.19 *4*	0.09 *2*	4973.918	3^-	4254.788	3^-			
722.252 *8*	1.5 *2*	3919.971	6^-	3197.713	5^-	M1+E2	+0.61 *+7−6*	Mult.: from Adopted Gammas. δ: the large solution is ruled out by ce data In β^- decay. Other: +0.65 *9* (1990Go33).
[x]724.6 *3*	0.046 *13*							
728.80 *6*	0.069 *12*	5339.48	8^+	4610.750	8^+			
[x]739.86 *5*	0.064 *11*							
747.551[e] *20*	0.35[e] *6*	4708.725	5^-	3961.172	5^-			Additional information 8.
748.845[e] *12*	2.2[e] *4*	3946.581	4^-	3197.713	5^-	[D(+Q)]	+0.07 *+5−4*	δ: the large solution is <−15, >+31, an unlikely alternative. Other: +0.072 *25* (1990Go33).
[x]754.23 *8*	0.076 *13*							
760.30 *2*	0.45 *7*	4680.271	7^-	3919.971	6^-	[D+Q]		δ: +0.19 *+4−3* or +5.2 *+15−12*.
763.429 *9*	3.2 *5*	3961.172	5^-	3197.713	5^-	M1+E2	−0.21 *+5−6*	Mult.: from Adopted Gammas. δ: the large solution is ruled out by ce data In β^- decay. Other: −0.13 *7* (1990Go33).
769.78 *2*	0.39 *6*	5193.435	5^+	4423.654	6^+			
[x]770.5 *3*	0.34 *7*							
771.74[j] *20*	0.16[j] *3*	5195.38	7^+	4423.654	6^+			
772.316[j] *15*	0.16[j] *3*	4480.749	6^-	3708.472	5^-	[D+Q]		I_γ: Iγ/Iγ(1283γ)=0.18 *5* (1990Go33). δ: +0.22 *+7−6* or +5.2 *+34−14*. Additional information 5.
779.94[a] *2*	0.20 *3*	4254.788	3^-	3475.077	4^-			Additional information 1.
782.83 *2*	0.19 *3*	4868.41	0^+	4085.58	2^+			
786.891 *10*	0.76 *11*	4261.914	4^-	3475.077	4^-	[D+Q]		I_γ: Iγ/Iγ(1647γ)=0.64 *6* (1990Go33). δ: −0.17 *8* or +1.3 *+3−2*.
789.358 *15*	0.37 *5*	5213.013	$(6)^+$	4423.654	6^+			
797.741 *10*	0.90 *13*	3995.440	4^-	3197.713	5^-	[D+Q]	+0.34 *5*	I_γ: Iγ/Iγ(1381γ)=0.297 *12* (1990Go33). δ: the large solution is +4.4 *9*, an unlikely alternative.
[x]800.99 *7*	0.079 *12*							
808.07 *4*	0.068 *11*	5037.551	3^-	4229.581	2^-			
821.540 *13*	0.72 *10*	4296.577	5^-	3475.077	4^-	[D+Q]		I_γ: Iγ/Iγ(588γ)=0.64 *4* (1990Go33). δ: −0.10 *4* or −4.2 *7*. Other: −0.11 *4* (1990Go33).
823.37 *9*	0.083 *13*	4860.87	8^+	4037.447	7^-			
830.55 *4*	0.088 *13*	4867.92	7^+	4037.447	7^-	[D+Q]		δ: −0.40 *+36−29* or +1.0 *5*.
[x]835.78 *13*	0.04 *2*							
839.734 *9*	1.5 *2*	4037.447	7^-	3197.713	5^-	[Q(+O)]		Mult.: δ(M3/E2)=+0.010 *+21−31*.
[x]842.9 *6*	0.017 *6*							
[x]846.79 *2*	0.21 *3*							
848.88 *4*	0.12 *2*	4323.947	4^+	3475.077	4^-			
860.557 *4*	7.0 *10*	3475.077	4^-	2614.524	3^-	M1+E2	−0.021 *21*	E_γ: calibration value from β^- decay. The authors report 860.545 *8*. Mult.: from Adopted Gammas. δ: the large solution is ruled out by ce data In β^- decay. Other: +0.015 *18* (1990Go33).
[x]868.15 *10*	0.17 *3*							

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

E_γ †	I_γ ‡	E_i(level)	J_i^π	E_f	J_f^π	Mult.#	δ@	Comments
868.522[n] *24*	0.16[n] *2*	5074.807		4206.281	6^-			Additional information 14.
869.43[n] *20*	0.37[n] *5*	5193.435	5^+	4323.947	4^+			
873.635 *15*	0.32 *4*	5079.915	6^-	4206.281	6^-			
879.19 *2*	0.33 *5*	5085.473	7^-	4206.281	6^-	[D+Q]		δ: +0.03 *+4−3* or −19 *+9−75*.
[x]881.45 *3*	0.21 *3*							
883.605 *9*	1.4 *2*	4358.670	4^-	3475.077	4^-	[D+Q]		δ: −0.22 *+6−7* or +1.4 *+3−2*.
892.25 *2*	0.25 *3*	5216.216	4^+	4323.947	4^+			
894.45 *3*	0.22 *3*	5074.807		4180.416	5^-			
[x]898.49 *12*	0.14 *2*							
[x]899.25 *6*	0.13 *2*							
[x]917.07 *2*	0.29 *4*							
921.4 *2*	0.022 *5*	5245.252	3^-	4323.947	4^+			
927.650 *8*	2.2 *3*	4125.348	5^-	3197.713	5^-	[D+Q]		δ: −0.15 *5* or +0.90 *+10−14*. Other: −0.06 *6* or +0.90 *13* (1990Go33).
[x]940.72 *8*	0.049 *7*							
949.83 *2*	0.27 *4*	5923.75	2^-	4973.918	3^-			
[x]954.60 *13*	0.043 *7*							
964.56 *6*	0.068 *10*	4911.345	4	3946.581	4^-			
[x]977.46 *11*	0.074 *12*							
[x]978.53 *13*	0.050 *7*							
982.709 *10*	2.6 *3*	4180.416	5^-	3197.713	5^-	[D+Q]		δ: −0.13 *+6−5* or +0.86 *+14−13*. Other: +0.15 *15* (1990Go33).
986.41 *9*	0.050 *8*	5037.551	3^-	4051.136	3^-			
993.105 *12*	0.66 *8*	5317.042	(3^+)	4323.947	4^+			
1000.681[a] *13*	0.56 *7*	4708.725	5^-	3708.472	5^-	[D+Q]	−0.19 *+7−8*	E_γ: 1990Go33 report Eγ=1000.51 *12*. The least-squares adjustment gives Eγ=1000.251 *19*. Additional information 9.
1008.558 *10*	2.1 *3*	4206.281	6^-	3197.713	5^-	[D+Q]		δ: +0.18 *+2−1* or +8.6 *+14−7*. Other: +0.195 *15* (1990Go33).
[x]1011.6 *3*	0.020 *4*							
[x]1023.75 *12*	0.062 *10*							
[x]1042.8 *2*	0.031 *11*							
1050.91[r] *2*	0.152[r] *16*	5280.49	0^-	4229.581	2^-			
[x]1054.22 *12*	0.025 *11*							
[x]1062.2 *4*	0.015 *5*							
1064.15[c] *2*	0.25[c] *3*	4261.914	4^-	3197.713	5^-	[D+Q]		δ: −0.40 *+10−14* or −1.9 *+5−4*. Other: +0.02 *3* (1990Go33).
1069.72[a] *4*	0.081 *10*	5276.426	4^-	4206.281	6^-			Additional information 23.
[x]1076.9 *4*	0.010 *3*							
1093.94[u] *4*	0.29 *3*	3708.472	5^-	2614.524	3^-	[Q(+O)]		δ: δ(M3/E2)=−0.01 *13*.
1098.85 *4*	0.14 *2*	4296.577	5^-	3197.713	5^-			
[x]1101.28 *9*	0.049 *7*							
[x]1105.65 *14*	0.055 *8*							
[x]1106.90 *12*	0.081 *10*							
1112.27[35] *8*	0.033[3] *3*	6086.19	1^-	4973.918	3^-			
1113.57[3] *3*	0.28[3] *4*	5074.807		3961.172	5^-			
1126.236 *13*	5.1 *6*	4323.947	4^+	3197.713	5^-	[D+Q]	+0.042 *21*	δ: other: +0.003 *18* (1990Go33).
[x]1143.351 *14*	0.011 *10*							
1155.00 *2*	0.29 *3*	5384.58	3^-	4229.581	2^-			
[x]1158.12 *6*	0.116 *13*							
1160.90 *2*	0.56 *6*	4358.670	4^-	3197.713	5^-	[D+Q]		I_γ: Iγ/Iγ(884γ)=0.36 *5* (1990Go33).

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	Comments
							δ: +0.19 *+6−5* or +10 *+13−3*. Other: +0.30 *10* or +5.2 *+46−20* (1990Go33).
[x]1163.93 *11*	0.052 *7*						
1185.571 *13*	1.6 *2*	4383.288	6⁻	3197.713	5⁻	[D+Q]	δ: +0.031 *+22−10* or −15 *+4−8*. Other: +0.063 *24* (1990Go33).
[x]1189.0 *2*	0.021 *4*						
1194.114[a] *22*	0.070 *8*	5245.252	3⁻	4051.136	3⁻		I_γ: the branching is a factor of about three higher than In (d,pγ). Additional information 22.
1199.62 *2*	0.37 *4*	5195.056	3⁻,4⁻	3995.440	4⁻		
[x]1202.8 *3*	0.028 *8*						
[x]1220.76 *3*	0.36 *4*						
1223.27 *2*	0.93 *10*	4698.318	3⁻	3475.077	4⁻	[D+Q]	δ: +0.07 *+7−6* or <−8.6, >+47. Other: 0.00 *9* (1990Go33).
1225.41[i] *7*	0.42[i] *4*	5923.75	2⁻	4698.318	3⁻		Additional information 29.
1225.916[i] *13*	3.8[i] *4*	4423.654	6⁺	3197.713	5⁻	[D(+Q)]	δ: −0.010 *+20−11*. Other: +0.030 *17* (1990Go33).
[x]1234.04 *8*	0.063 *8*						
1236.79 *4*	0.25 *3*	4711.819	4⁻	3475.077	4⁻	[D+Q]	δ: −0.41 *15* or −1.9 *+11−6*.
[x]1239.433 *14*	0.08 *3*						
[x]1247.24 *8*	0.052 *6*						
1252.98 *4*	0.22 *2*	5214.00	(5⁻)	3961.172	5⁻		
[x]1257.3 *2*	0.037 *8*						
[x]1261.54 *11*	0.034 *5*						
[x]1275.35 *8*	0.040 *5*						
1275.5[5] *5*	0.040 *5*	5195.38	7⁺	3919.971	6⁻		E_γ: from (d,pγ). 2005YaZW show an unplaced transition with Eγ=1275.35 *8* and Iγ=0.040. The energy fit is good; however, the branching is a factor of three higher than In (d,pγ). The evaluator assumes that part of Iγ(1275γ) can Be placed here.
1283.031 *12*	1.5 *2*	4480.749	6⁻	3197.713	5⁻	[D+Q]	δ: +0.031 *+11−21* or −19 *+6−12*. Other: +0.05 *3* (1990Go33).
1283.60[5] *4*		5545.50	(5⁻)	4261.914	4⁻		E_γ,I_γ: there is a 1283γ placed from this level In (d,pγ), with Iγ/Iγ(1837γ)=0.44 *9*. One thus expects such a transition In (n,n′γ) with Eγ=1283.60 *4* from the level energies, and Iγ=0.047 *10*. There is a 1283.074 *12* transition with Iγ=1.5 *2* placed from the 4481 level. A small part of that transition May belong here.
[x]1285.6 *12*	0.038 *15*						
[x]1290.15 *9*	0.064 *7*						
1297.86 *3*	0.15 *2*	5721.52	7⁻	4423.654	6⁺		
1301.74 *14*	0.033 *6*	5339.48	8⁺	4037.447	7⁻		
[x]1313.28 *8*	0.063 *7*						
1316.690[5] *22*		5675.369	2⁻,3,4	4358.670	4⁻		E_γ,I_γ: 2005YaZW report an unplaced transition with Eγ=1317.99 *5* and Iγ=0.068 *7*. In (d,pγ) there is a 1317.0 *10* transition placed from the 5675 level. From Iγ(1317γ)/Iγ(3060γ)=0.049 *20* In (d,pγ), one expects Iγ=0.015 *6* for a 1317 transition from the 5675 level In (n,n′γ). The evaluator suggests that part of the 1318γ May belong here. Eγ is from the level energies.
[x]1317.99 *5*	0.068 *7*						
1333.5 *3*	0.15 *3*	5384.58	3⁻	4051.136	3⁻		
[x]1335.94 *5*	0.142 *14*						
[x]1351.64 *7*	0.060 *7*						
1356.49 *4*	0.111 *11*	5481.88	5⁻	4125.348	5⁻		E_γ: not reported In (d,pγ).

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[@]	Comments
1367.0 *10*	0.28 *3*	5075.5		3708.472	5^-			E_γ: from (d,pγ). See comment on the 5075.5 level.
1369.87 *4*	0.127 *12*	5599.46	0^-	4229.581	2^-			
1380.889 *12*	2.9 *3*	3995.440	4^-	2614.524	3^-	[D(+Q)]	+0.000 *+31−21*	δ: the large solution is −6.7 *+8−12*, an unlikely alternative. Other: +0.057 *16* (1990Go33).
1387.13[z5] *6*	0.031[z] *9*	5648.99	3^-,4^-	4261.914	4^-			
1387.37[z] *3*	0.15[z] *2*	5382.83		3995.440	4^-			
1387.87[z5] *8*	0.061[z] *3*	6086.19	1^-	4698.318	3^-			
[x]1393.89 *13*	0.041 *5*							
1399.93 *6*	0.081 *8*	5783.22		4383.288	6^-			
[x]1408.7 *3*	0.030 *5*							
1413.026 *13*	2.0 *2*	4610.750	8^+	3197.713	5^-			
1413.509[5] *22*		5675.369	2^-,3,4	4261.914	4^-			E_γ,I_γ: 2005YaZW report a transition with Eγ=1413.026 *13* and Iγ=2.0 *2* placed from the 4611 level. In (d,pγ) there is a 1413.0 *10* transition placed from the 5675 level. From Iγ(1413γ)/Iγ(3020γ)= 0.10 *2* In (d,pγ), one expects Iγ=0.031 *6* for a 1413 transition from the 5675 level In (n,n′γ). Such a transition would Be completely masked by the strong 1413.026γ. The evaluator suggests that part of Iγ(1413γ) May belong here. Eγ is taken by the evaluator from the level energies.
1420.11[y] *4*	0.18[y] *2*	5545.50	(5^-)	4125.348	5^-			Additional information 25.
1420.574[5] *25*		5675.369	2^-,3,4	4254.788	3^-			E_γ,I_γ: 2005YaZW report a transition with Eγ=1420.24 *3* and Iγ=0.18 *2* placed from the 5545 level. In (d,pγ) there is a 1420.0 *10* transition placed from the 5675 level. From Iγ(1420γ)/Iγ(3020γ)= 0.21 *5* In (d,pγ), one expects Iγ=0.064 *15* for a 1420 transition from the 5675 level In (n,n′γ). If Iγ(1420γ) from the 5545 level is reduced by this amount, the branching from that level will Be brought into agreement with (d,pγ). See comment on the 1420γ from the 5545 level. Eγ is taken from the level energies.
1436.602 *12*	3.3 *3*	4051.136	3^-	2614.524	3^-	[D+Q]		δ: +1.7 *+3−2* or −0.12 *+7−6*. Other: −0.05 *5* (1990Go33).
[x]1441.1 *3*	0.040 *8*							
[x]1444.04 *9*	0.054 *7*							
[x]1454.07 *2*	0.28 *3*							
[x]1462.27 *10*	0.064 *7*							
[x]1464.8 *2*	0.109 *11*							
[x]1465.40 *11*	0.114 *14*							

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

E_γ †	I_γ ‡	E_i(level)	J_i^π	E_f	J_f^π	Mult.#	δ@	Comments
1471.5 *4*	0.019 *6*	4085.58	2^+	2614.524	3^-			
x1486.82 *5*	0.093 *9*							
x1498.06 *7*	0.123 *12*							
1498.828l *17*	0.095l *8*	4973.918	3^-	3475.077	4^-			Additional information 12.
1500.49l *3*	0.285l *23*	4698.318	3^-	3197.713	5^-			I_γ: Iγ/Iγ(1223γ)=0.36 *7* (1990Go33).
1505.43 *3*	0.21 *2*	5214.00	(5^-)	3708.472	5^-			
1511.00 *2*	0.35 *3*	4708.725	5^-	3197.713	5^-	[D+Q]		I_γ: Iγ/Iγ(1001γ)=0.61 *8* (1990Go33). δ: −0.32 *+10−11* or +1.2 *+4−2*.
x1513.83 *10*	0.097 *9*							
x1521.2 *4*	0.031 *9*							
1523.181 *4*	0.0281 *18*	5777.98	$2^-,3^-$	4254.788	3^-	[D+Q]	−1.3 *+6−42*	Additional information 27.
1523.6415 *6*	0.0661 *16*	5648.99	$3^-,4^-$	4125.348	5^-			
x1529.4 *2*	0.069 *7*							
x1533.46 *6*	0.132 *12*							
x1546.5 *5*	0.031 *10*							
x1552.8 *3*	0.050 *12*							
1561.0w5 *10*	0.076w *7*	5688?	6^-	4125.348	5^-			
1562.461w *15*	0.076w *7*	5037.551	3^-	3475.077	4^-			Additional information 13.
1564.29 *3*	0.59 *5*	4761.958	6^-	3197.713	5^-			
1567.97 *4*	0.19 *2*	5276.426	4^-	3708.472	5^-			
1571.49 *4*	0.143 *12*	5491.54		3919.971	6^-			
1584.35 *10*	0.037 *4*	5545.50	(5^-)	3961.172	5^-			
x1598.33 *6*	0.093 *8*							
1598.885 *4*		5545.50	(5^-)	3946.581	4^-			Eγ,Iγ: there is a 1599γ placed from this level In (d,pγ), with Iγ/Iγ(1837γ)=0.38 *8*. One thus expects such a transition In (n,n′γ) with Eγ=1598.88 *4* from the level energies, and Iγ=0.041 *9*. There is an unplaced transition with Eγ=1598.34 *6* and Iγ=0.093 *8*. Part of that transition May belong here. Additional information 26.
x1606.49 *14*	0.026 *4*							
1615.068 *15*	2.2 *2*	4229.581	2^-	2614.524	3^-	[D+Q]	+0.18 *+9−10*	Mult.: the large solution is <−11, >+10, an unlikely alternative. Other: +0.04 *3* or −7.8 *+29−16* (1990Go33).
x1623.4 *2*	0.029 *7*							
x1624.4 *5*	0.040 *7*							
x1630.9 *2*	0.037 *6*							
1640.267 *15*	3.1 *2*	4254.788	3^-	2614.524	3^-	[D+Q]		δ: −0.21 *+5−6* or +2.2 *+4−3*. Other: −0.11 *5* (1990Go33).
1647.38 *2*	1.29 *10*	4261.914	4^-	2614.524	3^-	[D+Q]		δ: +0.021 *+21−31* or −7.2 *+13−14*.
1652.270x *13*	0.153x *12*	5127.360	$2^-,3^-$	3475.077	4^-			Additional information 17.
1653.55x *6*	x	5648.99	$3^-,4^-$	3995.440	4^-			
1663.05 *6*	0.074 *7*	5658.52	5^-	3995.440	4^-			
1669.0 *2*	0.027 *5*	5923.75	2^-	4254.788	3^-			
x1674.16 *5*	0.092 *8*							
x1680.5 *2*	0.022 *4*							
1686.762 *15*	0.0372 *7*	6009.77	3^-	4323.947	4^+			Additional information 31.

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

E_γ †	I_γ ‡	E_i(level)	J_i^π	E_f	J_f^π	Mult.#	δ@	Comments
1693.2[a5] *2*	0.029 *4*	5923.75	2^-	4229.581	2^-			
x1702.9 *4*	0.014 *7*							
1709.6 *2*	0.026 *4*	4323.947	4^+	2614.524	3^-			
1713.62 *4*	0.190 *14*	4911.345	4	3197.713	5^-	[D+Q]		δ: −0.29 *+10−5* or −2.7 *+6−10*.
x1719.89 *6*	0.055 *5*							
x1728.7 *2*	0.076 *7*							
1728.7[5] *2*	0.076 *7*	5688?	6^-	3961.172	5^-			
x1731.15 *10*	0.081 *7*							
x1736.94 *5*	0.077 *6*							
1744.12 *2*	0.188 *14*	4358.670	4^-	2614.524	3^-	[D+Q]		I_γ: Iγ/Iγ(884γ)=0.170 *25* (1990Go33). δ: +0.04 *+7−6* or −9 *+3−10*.
x1761.51 *8*	0.072 *7*							
1764.71 *3*	0.53 *4*	4962.429	$4^{(-)},5^{(+)}$	3197.713	5^-	[D+Q]	+0.78 *+22−32*	
x1767.4 *10*	0.083 *10*							
1767.4[5] *10*	0.083 *10*	5688?	6^-	3919.971	6^-			
1770.20[c] *8*	0.066[c] *5*	5245.252	3^-	3475.077	4^-	[D+Q]		δ: +0.04 *17* or <−4.2, >11.
1774.25 *12*	0.146 *13*	5694.23	7^-	3919.971	6^-			
1776.09 *5*	0.61 *4*	4973.918	3^-	3197.713	5^-			I_γ: Iγ/Iγ(2359γ)=0.81 *18* (1990Go33).
x1778.94 *7*	0.118 *10*							
1778.94[5] *7*	0.040 *5*	5254.02?		3475.077	4^-			
x1782.41 *9*	0.076 *7*							
x1794.2 *4*	0.016 *4*							
x1798.85 *8*	0.056 *5*							
x1804.82 *7*	0.046 *4*							
x1809.5 *4*	0.030 *8*							
x1810.64 *11*	0.05 *2*							
x1814.0 *3*	0.016 *5*							
x1831.91 *11*	0.046 *4*							
1831.91[5] *11*	0.046 *4*	6086.19	1^-	4254.788	3^-			E_γ,I_γ: unplaced by 2005YaZW. An 1832γ is placed from this level In both (d,pγ) and (p,p′γ). The branching agrees well with values In those two reactions. The energy is somewhat discrepant, however, and is not included In the least-squares fit. The least-squares adjustment gives Eγ=1831.39 *8*.
1837.06 *4*	0.107 *8*	5545.50	(5^-)	3708.472	5^-			
x1842.1 *3*	0.030 *4*							
x1843.0 *2*	0.035 *5*							
x1843.9 *2*	0.028 *6*							
1856.67 *10*	0.035 *4*	6086.19	1^-	4229.581	2^-			
x1861.32 *8*	0.034 *4*							
x1867.4 *2*	0.059 *5*							
x1869.8 *2*	0.056 *7*							
1872.23[a5] *8*	0.096 *7*	5923.75	2^-	4051.136	3^-			
x1876.8 *2*	0.018 *4*							
1882.09 *10*	0.047 *4*	5079.915	6^-	3197.713	5^-			
x1910.86 *15*	0.034 *4*							
x1914.9 *4*	0.018 *4*							
1924.19 *9*	0.057 *5*	6009.77	3^-	4085.58	2^+			
x1926.8 *7*	0.014 *5*							
x1942.58 *7*	0.069 *5*							

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

E_γ [†]	I_γ [‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult. [#]	Comments
[x]1950.99 *12*	0.023 *3*						
[x]1959.2 *4*	0.016 *4*						
[x]1977.90 *9*	0.045 *4*						
1996.63[a] *9*	0.114 *9*	5193.435	5^+	3197.713	5^-		Additional information 18.
[x]1999.66 *10*	0.094 *8*						
2015.277[p] *19*	0.245[p] *15*	5213.013	$(6)^+$	3197.713	5^-		Additional information 20.
2016.14[p] *3*	0.78[p] *5*	5214.00	(5^-)	3197.713	5^-		Additional information 21.
[x]2017.60 *2*	0.17 *2*						
2034.97 *11*	0.065 *5*	6086.19	1^-	4051.136	3^-		
[x]2043.13 *6*	0.082 *5*						
2078.64 *3*	0.44 *3*	5276.426	4^-	3197.713	5^-		
2083.90 *4*	0.30 *2*	4698.318	3^-	2614.524	3^-		I_γ: Iγ/Iγ(1223γ)=0.19 *6* (1990Go33).
[x]2092.44 *11*	0.085 *7*						
2097.27 *2*	0.89 *5*	4711.819	4^-	2614.524	3^-	[D+Q]	δ: +0.11 *+3−4* or −23 *+10−71*.
[x]2104.65 *9*	0.75 *8*						
[x]2112.5[&] *4*							
[x]2149.86 *12*	0.034 *3*						
[x]2159.9 *6*	0.007 *3*						
[x]2174.4 *4*	0.021 *4*						
[x]2184.81 *11*	0.037 *4*						
2200.48[5] *3*	0.127 *7*	5675.369	2^-,3,4	3475.077	4^-	[D+Q]	E_γ: not seen In (d,pγ). Eγ gives E(level)=5675.57 *3*, In disagreement with E(level)=5675.37 *2* given by the 3060γ. δ: +0.18 *10* or >6.7, <−23.
[x]2214.0 *2*	0.046 *7*						
[x]2219.6 *2*	0.033 *4*						
[x]2250.05 *13*	0.038 *4*						
2260.05 *8*	0.099 *6*	5968.53	4^-	3708.472	5^-		E_γ: from (d,pγ). 2005YaZW report Eγ=2260.40 *6*; however, Iγ/Iγ(2771γ) compared with (d,pγ) suggests that only 25% of Iγ(2260γ) belongs here.
[x]2277.7 *3*	0.025 *4*						
2279.51[5] *20*	0.025 *4*	6274.96	3^-	3995.440	4^-		E_γ,I_γ: 2005YaZW report an unplaced transition with Eγ=2277.7 *3* and Iγ=0.025 *4*. In (d,pγ) there is a 2278γ placed from this level with Iγ/Iγ(3660γ)=0.32 *8*. This compares with 0.54 *10* In (N,nγ) and suggests that At least part of the 2278γ could Be placed from the 6275 level In (n,n′γ). Eγ is taken from the level energies.
[x]2281.9 *5*	0.025 *7*						
[x]2284.8 *2*	0.035 *5*						
2293.85 *3*	0.37 *2*	5491.54		3197.713	5^-	[D+Q]	δ: +0.16 *+6−5* or >+10, <−94.
2296.83 *2*	0.58 *3*	4911.345	4	2614.524	3^-	[D+Q]	δ: −0.08 *+4−5* or −4.7 *+9−12*.
[x]2314.0 *2*	0.046 *7*						
[x]2319.5 *6*	0.04 *2*						
2322.65 *3*	1.27 *6*	4937.19	3^-	2614.524	3^-	[D+Q]	δ: −0.2 *1* or +2.1 *+7−6*. Other: +0.3 *+10−3* (1990Go33).
2324.32 *9*	0.13 *2*	5799.41		3475.077	4^-		
2338.19[4] *5*	0.133[4] *23*	5813.27	3^-	3475.077	4^-		Additional information 28.
2338.765[4] *14*	1.17[4] *6*	4953.303	3^-	2614.524	3^-	[D+Q]	δ: −0.13 *11* or +2.0 *+7−5* (1990Go33).
2347.51 *9*	0.072 *6*	5545.50	(5^-)	3197.713	5^-		
[x]2354.5 *9*	0.011 *8*						
2359.38 *2*	0.59 *3*	4973.918	3^-	2614.524	3^-	[D+Q]	δ: −0.13 *+10−8* or +1.8 *+5−4*.
2366.3 *3*	0.28 *3*	5563.73	3^-	3197.713	5^-		
[x]2371.4 *4*	0.35 *4*						
[x]2376.0 *4*	0.38 *4*						

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[@]	Comments
[x]2380.4 *5*	0.29 *4*							
2398.48 *2*	0.42 *2*	5873.572	3^-	3475.077	4^-			
2422.997 *15*	0.95 *4*	5037.551	3^-	2614.524	3^-	[D+Q]		δ: +0.9 *+20−3* or +1.8 *+10−12*.
[x]2444.0 *7*	0.57 *12*							
[x]2445.84 *5*	0.166 *9*							
2451.20 *8*	0.081 *5*	5648.99	3^-,4^-	3197.713	5^-			
2460.80 *5*	0.123 *7*	5658.52	5^-	3197.713	5^-			
[x]2482.9 *5*	0.015 *4*							
2512.818 *12*	0.81 *4*	5127.360	2^-,3^-	2614.524	3^-	[D+Q]	+1.3 *+9−6*	
2534.68 *3*	0.257 *12*	6009.77	3^-	3475.077	4^-			
[x]2560.58 *11*	0.089 *7*							
[x]2568.8 *5*	0.016 *4*							
2580.41 *7*	0.156 *10*	5195.056	3^-,4^-	2614.524	3^-			
2601.69 *2*	0.80 *4*	5216.216	4^+	2614.524	3^-	[D+Q]	+0.095 *+45−43*	
[x]2607.76 *5*	0.35 *2*							
2614.511[t] *10*	100 *4*	2614.524	3^-	0	0^+			
[x]2622.52 *7*	0.195 *11*							
2625.2[5] *5*		5239.7?		2614.524	3^-			E_γ: from (d,pγ). In (d,pγ), a transition with this energy is shown defining a level At 5239, separate from the 0^+ level At 5241. 2005YaZW show a 2626.5 *4* transition doubly placed from the 0^+ level and from a 6102 level. The 6102 level is not seen In (d,pγ). All three postulated levels decay via a single 2626γ. IT is thus possible that part of the 2626γ In (n,n′γ) should Be placed from the 5239 level postulated In (d,pγ).
2626[q]	0.156[q] *6*	6101.1	(5^+)	3475.077	4^-			
2626.5[q] *4*	0.62[q] *3*	5241.0	0^+	2614.524	3^-			
2630.71 *2*	0.96 *4*	5245.252	3^-	2614.524	3^-	[D+Q]		δ: −0.19 *8* or +2.1 *5*.
[x]2649.1[&] *5*								
2662.02 *5*	0.066 *4*	5276.426	4^-	2614.524	3^-			
2671.942 *13*	0.66 *3*	5286.486	$2,3^-$	2614.524	3^-	[D+Q]	+0.05 *+8−3*	
2672.8[5] *8*		6147.9?		3475.077	4^-			E_γ: from (d,pγ). 2005YaZW report a 2671.983 *13* placed entirely from the 5286 level. If part of Iγ(2672γ) could Be placed here, the 6147 level May Be populated also In (n,n′γ). Eγ is from (d,pγ).
[x]2683.7 *5*	0.020 *7*							
2702.42 *3*	0.150 *7*	5317.042	(3^+)	2614.524	3^-			I_γ: Iγ/Iγ(993γ)=0.22 *9* (1990Go33).
2720.57 *4*	0.103 *5*	5918.28	3^-,$4,5^-$	3197.713	5^-			
[x]2730.84 *2*	0.061 *14*							
2732.729 *15*	0.66 *3*	5347.273	3^-	2614.524	3^-	[D+Q]		δ: +0.11 *8* or +1.0 *2*.
[x]2753.7[&] *10*								
2768.31 *5*	0.317 *15*	5382.83		2614.524	3^-			E_γ: not reported In (d,pγ).
2770.038[s] *24*	0.48[s] *2*	5384.58	3^-	2614.524	3^-	[D+Q]		δ: −0.20 *+15−21* or −2.6 *+10−18*. Additional information 24.

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

E_γ[†]	I_γ[‡]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[#]	δ[@]	Comments
2770.92[s] *8*	0.078[s] *3*	5968.53	4^-	3197.713	5^-			Additional information 30.
[x]2791.8 *2*	0.019 *2*							
[x]2796.7 *3*	0.018 *3*							
[x]2797.4 *3*	0.015 *2*							
[x]2798.7 *6*	0.011 *5*							
[x]2813.86 *8*	0.040 *2*							
[x]2840.0 *2*	0.021 *2*							
[x]2844.8[&] *6*								
[x]2855.89 *6*	0.046 *3*							
2867.35 *3*	0.133 *6*	5481.88	5^-	2614.524	3^-	[Q+O]	+0.042 *+53−32*	
[x]2877.29 *7*	0.052 *3*							
2902.17 *2*	0.50 *2*	5516.716	3^-	2614.524	3^-	[D+Q]	−0.94 *+15−16*	
2933.57 *2*	0.43 *2*	5548.115	2^-	2614.524	3^-			
2946.79 *5*	0.36 *2*	5561.31	2^+	2614.524	3^-	[D+Q]	+0.23 *+23−17*	
2949.18 *4*	0.49 *2*	5563.73	3^-	2614.524	3^-			
[x]2981.4 *2*	0.027 *2*							
[x]2993.66 *10*	0.027 *2*							
3024.96 *9*	0.033 *2*	5639.55	1^-	2614.524	3^-			
3034.52 *9*	0.031 *2*	5648.99	3^-,4^-	2614.524	3^-	[D+Q]		δ: −0.17 *+13−18* or −3.8 *+14−34*.
3044.0 *2*	0.014 *2*	5658.52	5^-	2614.524	3^-			
3060.82 *2*	0.306 *11*	5675.369	2^-,3,4	2614.524	3^-	[D+Q]		δ: +0.06 *+11−4* or +1.1 *+3−2*.
3075.57 *2*	0.293 *11*	5690.119	4^+	2614.524	3^-	[D+Q]	−0.031 *+31−21*	
[x]3080.9 *4*	0.013 *2*							
3101.07 *10*	0.028 *2*	5715.51	2^+	2614.524	3^-			
[x]3134.6 *4*	0.010 *2*							
[x]3151.3 *4*	0.014 *2*							
3163.43 *3*	0.278 *10*	5777.98	2^-,3^-	2614.524	3^-	[D+Q]		δ: −0.38 *+7−8* or +4.4 *+23−11*.
3174.79 *3*	0.186 *7*	5789.34	2^+,3^+,4^+	2614.524	3^-			
[x]3185.6 *4*	0.008 *2*							
3198.72 *4*	0.157 *6*	5813.27	3^-	2614.524	3^-	[D+Q]		δ: −0.59 *+12−14* or >+6.7, <−4.0.
[x]3206.1 *4*	0.013 *2*							
[x]3260.0 *3*	0.014 *2*							
[x]3269.08 *3*	0.096 *7*							
3271.00 *3*	0.298 *11*	5885.55	3^-	2614.524	3^-			
3303.65 *7*	0.043 *2*	5918.28	3^-,4,5^-	2614.524	3^-			
3308.9 *2*	0.018 *2*	5923.75	2^-	2614.524	3^-			
[x]3318.6 *4*	0.005 *2*							
3397.09[2] *6*	0.075[2] *3*	6011.64		2614.524	3^-			
[x]3413.0 *3*	0.0091 *15*							
[x]3420.77 *9*	0.015 *2*							
[x]3438.53 *11*	0.034 *2*							
[x]3464.8 *5*	0.0080 *15*							
3471.7 *4*	0.015 *2*	6086.19	1^-	2614.524	3^-			
[x]3538.9 *2*	0.024 *2*							
[x]3559.4 *8*	0.006 *2*							
[x]3609.3 *6*	0.005 *2*							
[x]3620.4 *3*	0.016 *2*							
[x]3628.77 *8*	0.066 *3*							
3628.77[5] *8*	0.06 *3*	6243.32?		2614.524	3^-			E_γ: the 3629γ is unplaced In (n,n′γ). In (d,pγ) a 3627.9 *9* transition defines a level At 6242. This level May also Be excited In (n,n′γ).
[x]3641.13 *6*	0.082 *4*							
3641.13[5] *6*	0.082 *4*	6255.67?	2^+	2614.524	3^-			E_γ: the 3641γ is unplaced In

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

E_γ †	I_γ ‡	E_i(level)	J_i^π	E_f	J_f^π	Comments
						(n,n′γ). In (d,pγ) a 3636 *5* transition defines a level At 6250. This level May also Be excited In (n,n′γ).
x3659.5 *2*	0.048 *4*					
3660.4 *2*	0.046 *3*	6274.96	3−	2614.524	3−	
x3662.61 *13*	0.037 *4*					
x3719.6 *3*	0.027 *2*					
x3723.7 *2*	0.025 *3*					
x3737.8 *12*	0.020 *3*					
x3739.6 *4*	0.014 *2*					
x3746.6 *5*	0.009 *2*					
x3774.8 *8*	0.006 *2*					
x4001.9& *6*						
4085.53 *7*	4.09 *14*	4085.58	2+	0	0+	
x4218.0 *2*	0.018 *2*					
4229.49 *9*	0.47 *2*	4229.581	2−	0	0+	I_γ: Iγ/Iγ(1615γ)=0.26 *3* (1990Go33).
4324.3 *4*	0.016 *2*	4323.947	4+	0	0+	
x4405.1 *3*	0.009 *2*					
x4418.7 *2*	0.020 *2*					
4697.88 *14*	0.048 *3*	4698.318	3−	0	0+	
x4733.6 *9*	0.004 *2*					
x4748.2 *9*	0.0044 *14*					
x4809.6 *5*	0.009 *2*					
4841.46 *12*	0.89 *4*	4841.55	1−	0	0+	
x4873.1 *5*	0.011 *2*					
x4933.5 *2*	0.023 *2*					
x4949.6 *9*	0.004 *2*					
4974.3 *9*	0.005 *2*	4973.918	3−	0	0+	
5037.3 *7*	0.010 *2*	5037.551	3−	0	0+	
5127.6 *2*	0.143 *7*	5127.360	2−,3−	0	0+	
x5133.7 *6*	0.017 *3*					
5245.0 *7*	0.010 *2*	5245.252	3−	0	0+	
x5257.3 *8*	0.006 *2*					
5287.1 *3*	0.14 *2*	5286.486	2,3−	0	0+	
5291.74 *13*	0.59 *3*	5291.81	1−	0	0+	
x5346.0 *4*	0.019 *3*					
5384.42 *14*	0.081 *5*	5384.58	3−	0	0+	
5511.70 *14*	0.51 *3*	5511.78	1−	0	0+	
x5521.2 *14*	0.006 *3*					
5547.6 *3*	0.012 *2*	5548.115	2−	0	0+	
5560.8 *2*	0.130 *7*	5561.31	2+	0	0+	
5639.7 *2*	0.32 *2*	5639.55	1−	0	0+	
5641.9 *2*	0.29 *2*	5641.98	1,2+	0	0+	
x5714.3 *2*	0.243 *13*					
5715.0 *2*	0.222 *12*	5715.51	2+	0	0+	
5777.4 *3*	0.025 *2*	5777.98	2−,3−	0	0+	
5804.9 *3*	0.199 *12*	5805.0	1	0	0+	
5819.4 *2*	0.189 *12*	5819.49	1+,2+	0	0+	
5844.3 *2*	0.176 *12*	5844.39	1+	0	0+	
x5900.8 *8*	0.009 *2*					
x5909.5 *6*	0.009 *2*					
x5920.1 *3*	0.038 *4*					
5946.5 *2*	0.22 *3*	5946.59	1−	0	0+	
x5965.4 *3*	0.023 *3*					
x6017.7 *3*	0.034 *6*					
6084.9 *10*	0.0021 *12*	6086.19	1−	0	0+	
x6110.1 *4*	0.023 *6*					

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

E_γ [†]	I_γ [‡]	E_i(level)
[x]6117.6 *7*	0.010 *3*	
[x]6121.1 *11*	0.009 *3*	
[x]6188.0 *4*	0.0034 *12*	

[†] From 2005YaZW, except where noted otherwise.
[‡] Relative intensities from 2005YaZW normalized to Iγ(2614γ)=100 *4*. Intensities are also reported by 1990Go33 and are given In comments In the form of branching ratios relative to the strongest transition.
[#] Values In square brackets are the mults for which the δ data of 2005YaZW, based on γ(θ), apply.
[@] From 2005YaZW based on γ(θ). Where two solutions are given, with No basis for ruling one out, the two values are given In comments. Other δ values, from 1990Go33, are also given In comments.
[&] From 1990Go33. Not reported by 2005YaZW.
[a] The energy fit is poor. The transition is not included In the least-squares fit.
[b] 2005YaZW report E=233.32 *7* with Iγ=0.21 *5* doubly placed from the 3708 and 5093 levels, with Iγ divided on the basis of coincidence data. 90.0% of Iγ belongs with the 3708 level. Eγ for placement from the 5093 level is taken by the evaluator from the energy level difference.
[c] Close-lying doublet with a <5% contribution from a ^{207}Pb γ line. Note, however, for the 1064γ from the 4262 level, that Iγ/Iγ(1647γ)=0.194 *28* compared with 0.044 *7* In (d,pγ), suggesting that part of Iγ(1064γ) belongs elsewhere.
[d] Eγ is from Adopted Gammas. The authors′ value of 510.819 *6* is from a peak unresolved from annihilation radiation.
[e] 2005YaZW report E=748.845 *12* with Iγ=2.5 *4* doubly placed from the 3947 and 4709 levels with Iγ divided on the basis of coincidence data. 86.0% of Iγ belongs with the 3947 level. Eγ for placement from the 4709 level is taken from the energy level difference.
[f] 2005YaZW report E=485.06 *9* with Iγ=0.08 *2* doubly placed from the 3961 and 4868 levels with Iγ divided on the basis of coincidence data. 75.0% of Iγ is placed with the 3961 level. A comparison with branching In (d,pγ) suggests that the split should Be closer to 50%−50%. This split would give reasonable agreement In branchings for both levels from the two reactions. Eγ for placement from the 3961 level is taken by the evaluator from β^- decay and Eγ for placement from the 4868 level is taken by the evaluator from the level energies.
[g] 2005YaZW report E=362.842 *14* with Iγ=0.65 *14* doubly placed from the 4324 and 4359 levels with Iγ divided on the basis of coincidence data. 80.0% of Iγ belongs with the 4324 level. Eγ for each placement is taken by the evaluator from the energy level difference.
[h] 2005YaZW report Eγ=462.71 *2* with Iγ=0.058 *12*. Only part of this transition belongs with ^{208}Pb. The intensity for the component belonging to ^{208}Pb was extracted by the authors from excitation function data. The energy is taken by the evaluator from the level energies.
[i] 2005YaZW report E=1225.916 *13* with Iγ=4.2 *4* doubly placed from the 4424 and 5924 levels with Iγ divided on the basis of coincidence data. 90.0% of Iγ belongs with the 4424 level. Eγ for placement from the 5924 level is taken by the evaluator As 1225.41 *7* from (d,pγ).
[j] 2005YaZW report E=771.75 *3* with Iγ=0.32 *5* doubly placed from the 4481 and 5195.4 levels with Iγ divided on the basis of coincidence data. 50% of Iγ is assigned to each placement. Eγ for placement from the 4481 level is taken by the evaluator from the level energies. Since all the transitions from the 5195.5 level are multiply placed, the evaluator gives Eγ=771.74 *20* from (d,pγ).
[k] 2005YaZW report E=443.73 *2* with Iγ=0.47 *10* doubly placed from the 4698 and 4868 levels with Iγ divided on the basis of coincidence data. 25.0% of Iγ is assigned to the 4867 level. A comparison with branching In (d,pγ) suggests that the this percentage should Be closer to 40. A 40%−60% split would give reasonable agreement for both levels for the two reactions. Eγ for each placement is taken by the evaluator from the level energy difference.
[l] 2005YaZW report E=1500.49 *3* with Iγ=0.38 *3* doubly placed from the 4698 and 4974 levels with Iγ divided on the basis of coincidence data. 75.0% of Iγ belongs with the 4698 level. Eγ for placement from the 4974 level is taken from the energy level difference.
[m] 2005YaZW report E=386.31 *3* with Iγ=0.46 *10* overlapping a background transition. They assign E=386.3 *10* with Iγ=10% of

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^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

the observed intensity to this placement. This gives Iγ/Iγ(257γ+830γ)=0.15 *5*. This ratio is 0.48 *18* In (d,pγ), suggesting that≈30% of the observed Iγ should Be assigned to this placement.

[n] 2005YaZW report E=868.89 *2* with Iγ=0.53 *7* doubly placed from the 5075 and 5194 levels with Iγ divided on the basis of coincidence data. 70.0% of Iγ belongs with the 5194 level. Eγ for placement from the 5075 level is taken by the evaluator from the level energies. For placement from the 5194 level, the evaluator takes Eγ=869.43 *20* from (d,pγ). The 5075 level is not populated In that reaction.

[o] 2005YaZW report E=583.187 *4* with Iγ=57 *10* doubly placed from the 3198 and 5195.4 levels with Iγ divided on the basis of coincidence data. 99.9% of Iγ belongs with the 3198 level. Eγ for placement from the 5195.4 level is taken by the evaluator from the level energies.

[p] 2005YaZW report E=2016.02 *2* with Iγ=1.02 *6* doubly placed from the 5213 and 5214 levels with Iγ divided on the basis of coincidence data. 76.0% of Iγ belongs with the 5214 level. Eγ for each placement is taken by the evaluator from the energy level difference.

[q] 2005YaZW report Eγ=2626.5 *4* with Iγ=0.78 *3*. 1996Ye01 establish Eγ=2626.5 *4* In coincidence with the 2614.5γ As defining a level At 5241.1 *4*. 2005YaZW propose, on the basis of coincidence data, that 20% of this peak should Be placed deexciting a level At 6102.

[r] Doublet with a background line. A 20% contribution from a ^{118}Sn impurity line has been subtracted out.

[s] 2005YaZW report E=2770.91 *3* with Iγ=0.56 *2* doubly placed from the 5385 and 5969 levels with Iγ divided on the basis of coincidence data. 86.0% of Iγ belongs with the 5385 level. Eγ for placement from the 5969 level is taken by the evaluator from (d,pγ) and Eγ for placement from the 5385 level is taken from the level energies.

[t] From 2000He14. Used As a calibration point.

[u] From the level scheme. The value is a weighted average of 860.557 *4* + 233.32 *7*=1093.88 *7* and 510.77 *4* + 583.187 *2*=1093.96 *4*. The authors′ value of 1094.06 *3* is from a close-lying doublet with a <5% contribution from a ^{207}Pb G.

[v] 2005YaZW report Eγ=702.21 *8* with Iγ=0.18 *3* placed from the 4698 level. The energy fit is poor and from a comparison with branching In (d,pγ), about 75% of the intensity should Be placed elsewhere. In (d,pγ) there is also a 702γ placed from the 5085 level. The evaluator assigns a component of the 702γ seen In (n,n′γ) to the 5085 level. For each placement, the evaluator gives Eγ As given by the energy level difference. From Iγ(702γ)/Iγ(1223γ)=0.041 *6* and Iγ(702γ)/Iγ(879γ)=0.13 *5* from (d,pγ) for the 4698 and 5085 levels, respectively, the evaluator gives Iγ=0.038 *4* and 0.043 *15* for the components of the 702γ from the 4698 and 5085 levels, respectively. The sum for these two deduced components is just 0.081 *16*, which still leaves a major component of the 702γ unplaced.

[w] 2005YaZW report Eγ=1561.72 *7* with Iγ=0.152 *14* placed from the 5037 level. The energy fit is poor, and the branching is a factor of two higher than In (d,pγ). Eγ is taken by the evaluator from the level energies. Part of the intensity May belong to a 5688 level seen In (d,pγ). The evaluator assigns 50% of Iγ to both placements. This gives branchings consistent with (d,pγ) for both levels. Eγ for placement from the 5688 level is taken from (d,pγ).

[x] 2005YaZW report Eγ=1652.57 *4* placed from the 5127 level. The energy fit is poor, and Iγ/Iγ(2512γ) is a factor of three higher than In (d,pγ) and (p,p′γ). Eγ is taken by the evaluator from the level energies. Part of the intensity could perhaps Be assigned to the 5649 level. The intensity can Be divided between the 5127 and 5649 levels such that the branchings for both levels agree with the (d,pγ) data.

[y] 2005YaZW report a transition with Eγ=1420.24 *3* and Iγ=0.18 *2* placed entirely from the 5545 level. The branching of this transition is about a factor of four higher than In (d,pγ). Part of this transition May belong with the 5675 level where a 1420γ is placed In (d,pγ). Iγ In (n,n′γ) can Be divided such that the branching from both the 5545 and 5675 are consistent with (d,pγ). In view of this possible double placement, the 1420γ is not included In the least-squares fit.

[z] 2005YaZW report a transition with Eγ=1387.37 *3* with Iγ=0.24 *2* placed from the 5383 level. In (d,pγ), In addition to this placement, there is a 1387γ placed from the 5649 level. From Iγ(1387γ)/Iγ(2451γ + 3034γ)=0.28 *8* In (d,pγ), one expects Iγ=0.031 *9* for a component of the 1387γ placed from the 5649 level. In both (d,pγ) and (p,p′γ) there is also a 1388γ placed from the 6086 level. From Iγ(1388γ)/Iγ(1857γ + 2035γ + 3472γ)=0.53 *4* In (d,pγ), one expects Iγ=0.061 *3* for a 1388γ from the 6086 level In (n,n′γ). These two additional placements of the 1387γ leave Iγ=0.15 *2* for placement from the 5383 level. Eγ for placement from the 5649 and 6086 levels is taken from the level energies.

[1] 2005YaZW report a transition with Eγ=1523.10 *6* and Iγ=0.094 *9* placed entirely from the 5778 level. In (d,pγ), In addition to this placement, there is a 1523γ placed from the 5649 level. From Iγ(1523γ)/Iγ(2451γ + 3034γ)=0.65 *14*, one expects Iγ=0.066 *16* for a component of the 1523γ placed from the 5649 level. This reduces Iγ for the component from the 5778 level to 0.028 *18*, a value that gives agreement with branching from (d,pγ) for that level. Eγ for placement of the 1523γ from both the 5649 and 5778 levels is taken by the evaluator from the level energies.

Continued on next page (footnotes at end of table)

^{208}Pb(n,n′γ) (continued)

γ(^{208}Pb) (continued)

[2] 2005YaZW report levels At 6010, deexciting via Eγ=1924 and 2535, and At 6011 deexciting via Eγ=1687 and 3397. For the 6011 level, the two transitions give discrepant energies, the 1687γ giving E(level)=6010.72 *15* and the 3397γ giving 6011.64 *6*. For the 6010 level, the two transitions give consistent energies of 6009.78 *11* and 6009.78 *3*, respectively. The 1687γ thus gives an E(level) lying 1 keV below that given by the 3398γ and 1 keV above that given by the 1924 and 2535γ′s. In (d,pγ), the 3397γ is not reported and a 1686γ is placed from the 6010 level. The branchings of the 1686, 1924, and 2535γ′s In (d,pγ) and (n,n′γ) agree well. Thus, In spite of the energy discrepancy, the (d,pγ) scheme seems correct and is adopted by the evaluator. The 1687γ is thus included with the 6010 level and removed from the 6011 level. Eγ is taken from the level energies.

[3] 2005YaZW report a transition with Eγ=1113.57 *3* with Iγ=0.31 *4* placed from the 5075 level. In both (d,pγ) and (p,p′γ) there is an 1113γ placed from the 6086 level. From Iγ(1113γ)/Iγ(1857γ + 2035γ + 3472γ)=0.277 *25* In (d,pγ), one expects Iγ=0.033 *3* for an 1113γ from the 6086 level In (n,n′γ). This leaves Iγ=0.28 *4* for placement of the 1113γ from the 5075 level. Eγ for placement from the 6086 level is taken from the energy level difference.

[4] 2005YaZW report a transition with Eγ=2338.765 *14* with Iγ=1.30 *6* placed from the 4953 level. In (d,pγ), there is a 2338γ placed from the 5813 level. From Iγ(2338γ)/Iγ(3199γ)=0.85 *14*, on expects Iγ=0.133 *23* for a component of the 2338γ placed from the 5813 level In (n,n′γ). This leaves Iγ=1.17 *6* for placement of the 2338γ from the 4953 level. Eγ for placement from the 5813 level is taken from the level energies.

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

[x] γ ray not placed in level scheme.

^{208}Pb(n,n′γ)

Level Scheme

Intensities: Relative I_γ

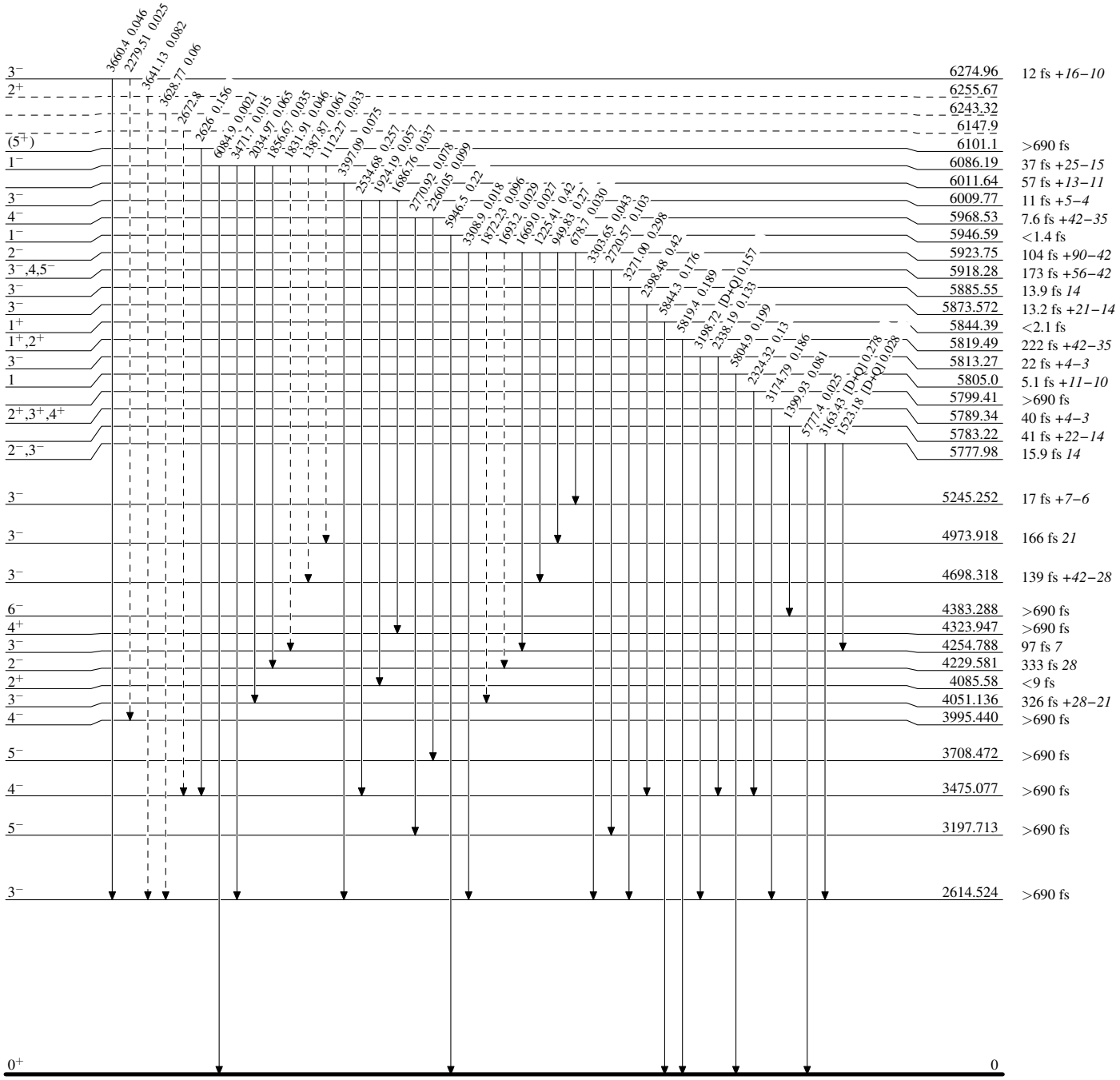
Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$

γ Decay (Uncertain)



$^{208}_{82}Pb_{126}$

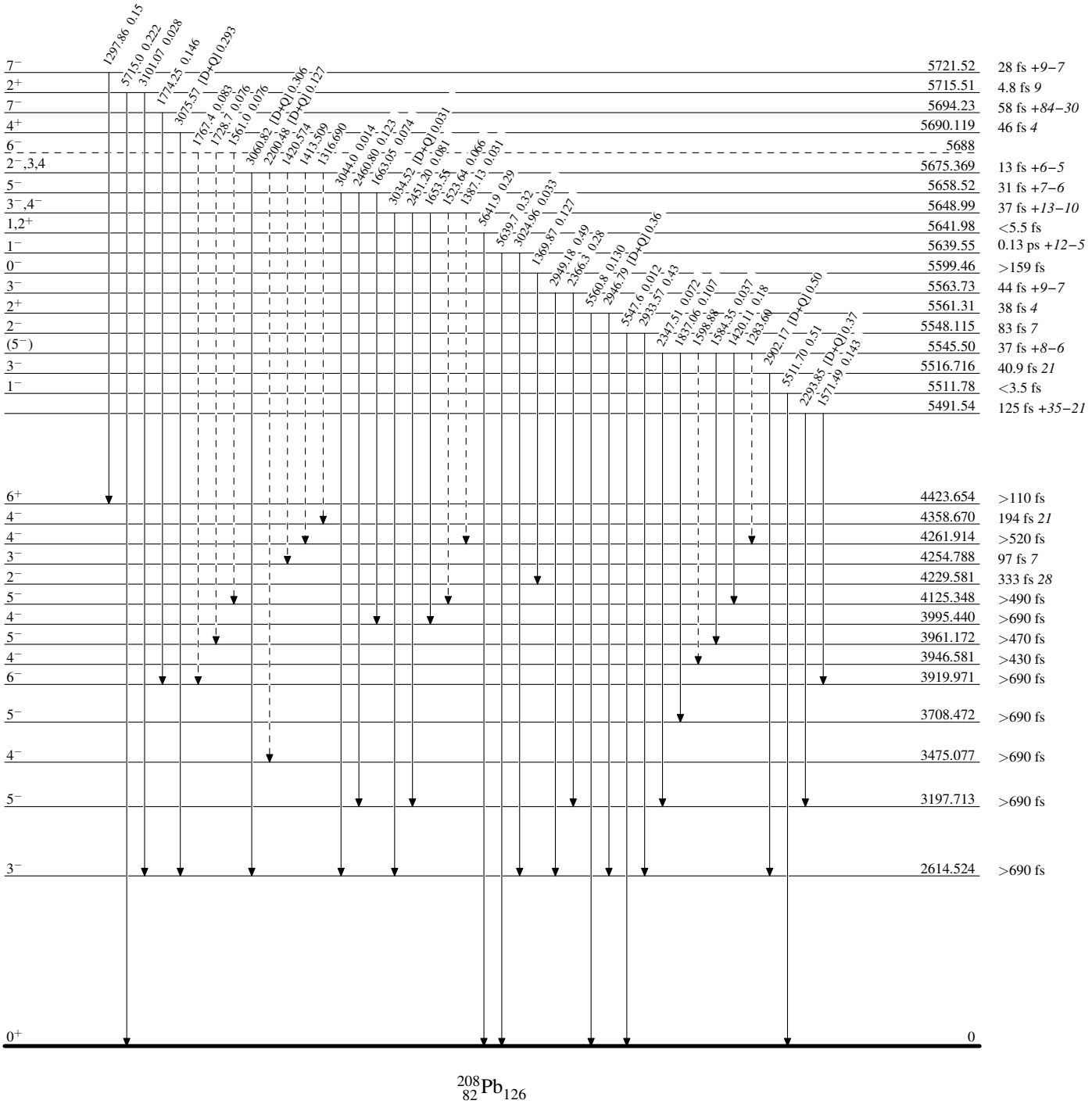
^{208}Pb(n,n′γ)

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



$^{208}_{82}Pb_{126}$

^{208}Pb(n,n′γ)

Level Scheme (continued)

Intensities: Relative I_γ

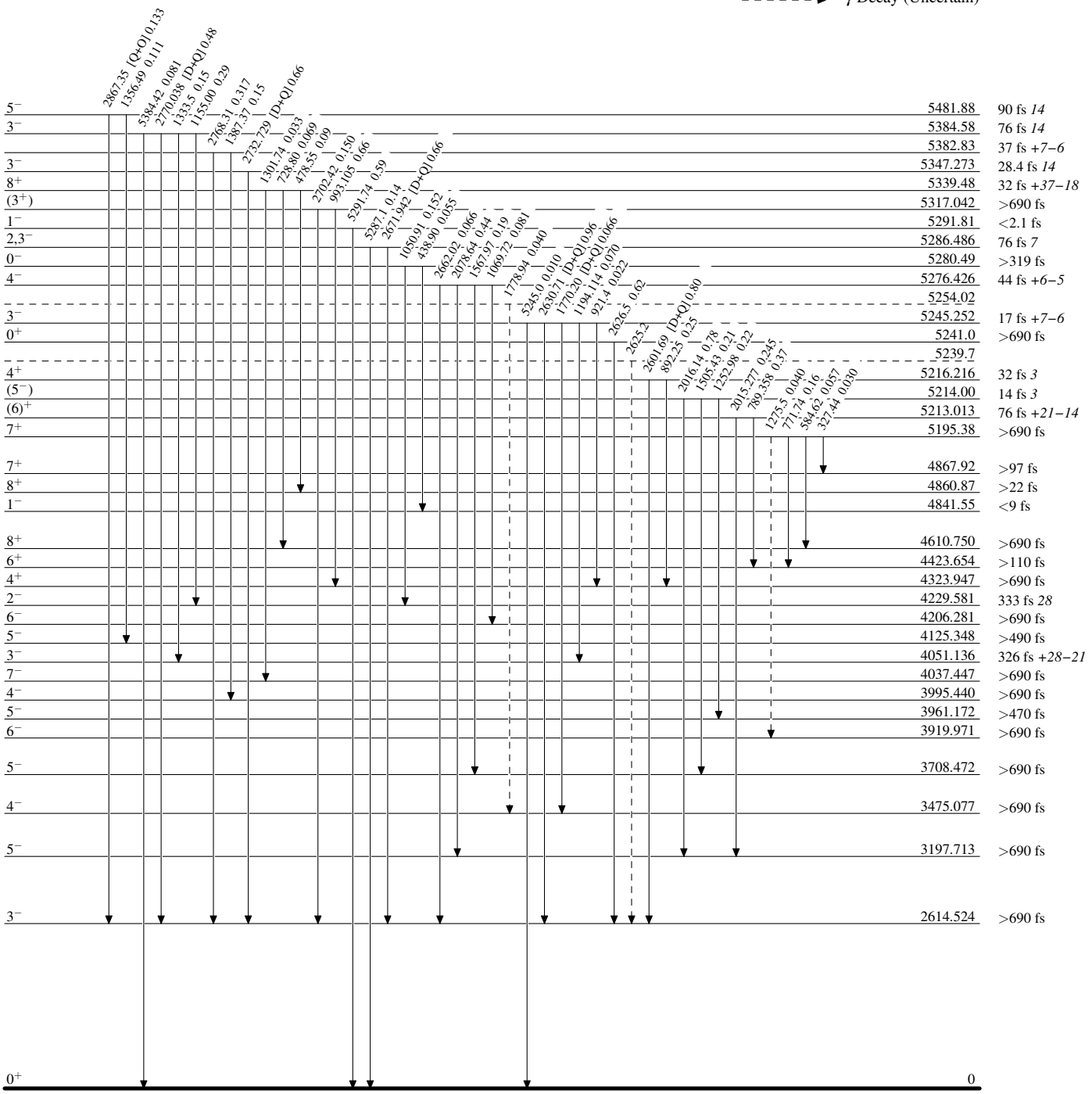
Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$

γ Decay (Uncertain)



$^{208}_{82}Pb_{126}$

^{208}Pb(n,n′γ)

Level Scheme (continued)

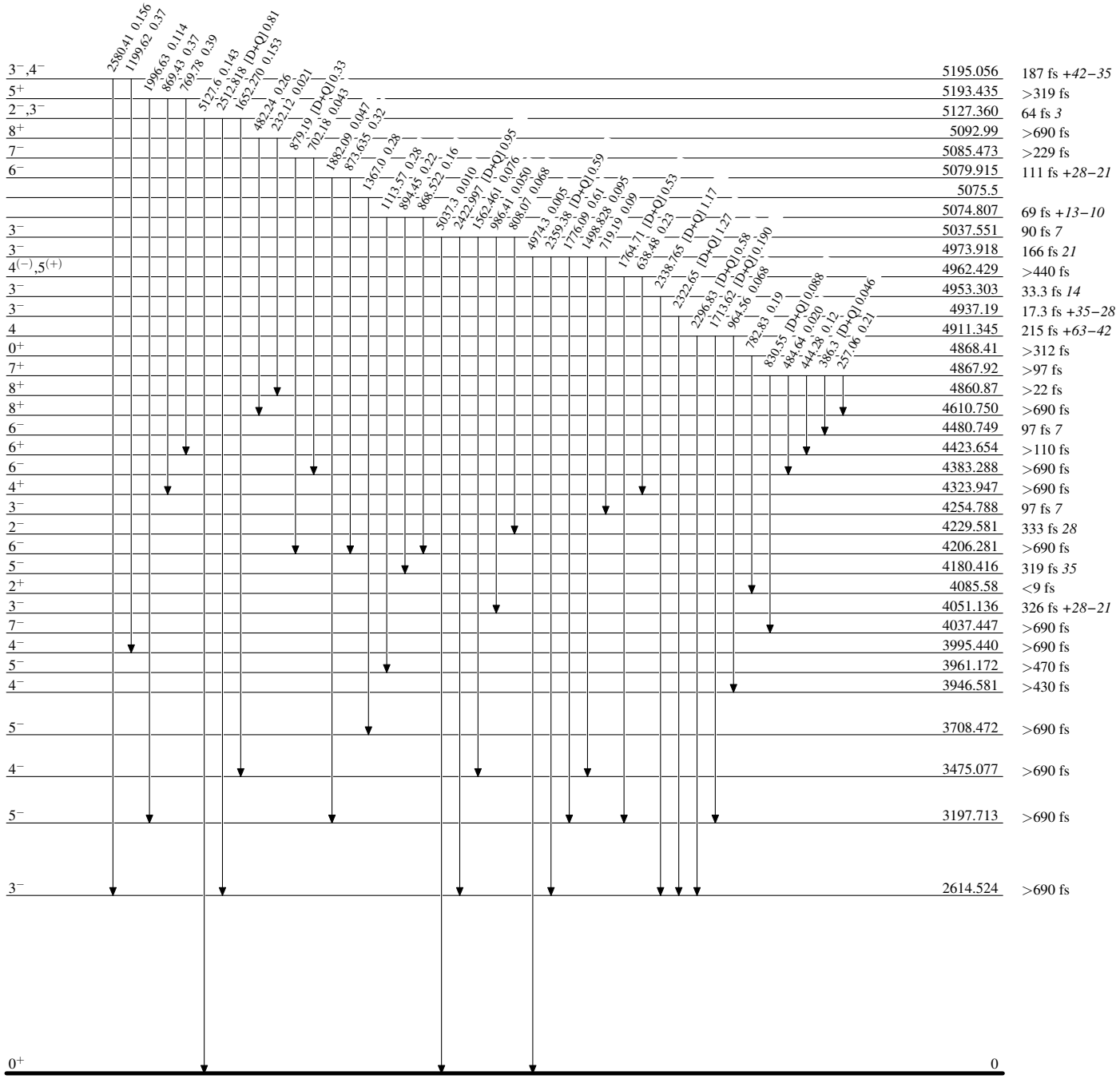
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$



$^{208}_{82}Pb_{126}$

^{208}Pb(n,n′γ)

Level Scheme (continued)

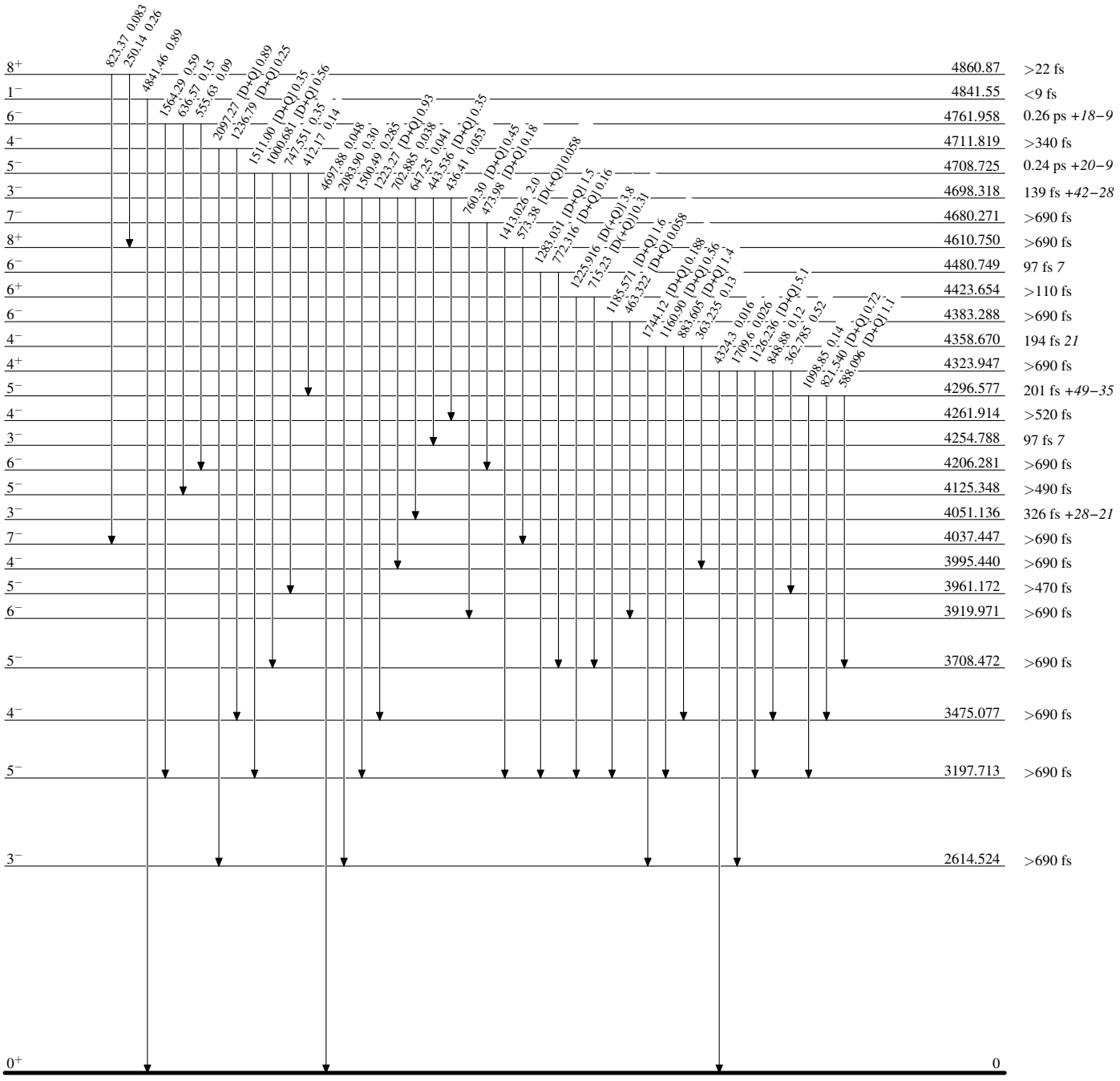
Intensities: Relative I_γ

Legend

$I_\gamma < 2\% \times I_\gamma^{max}$

$I_\gamma < 10\% \times I_\gamma^{max}$

$I_\gamma > 10\% \times I_\gamma^{max}$

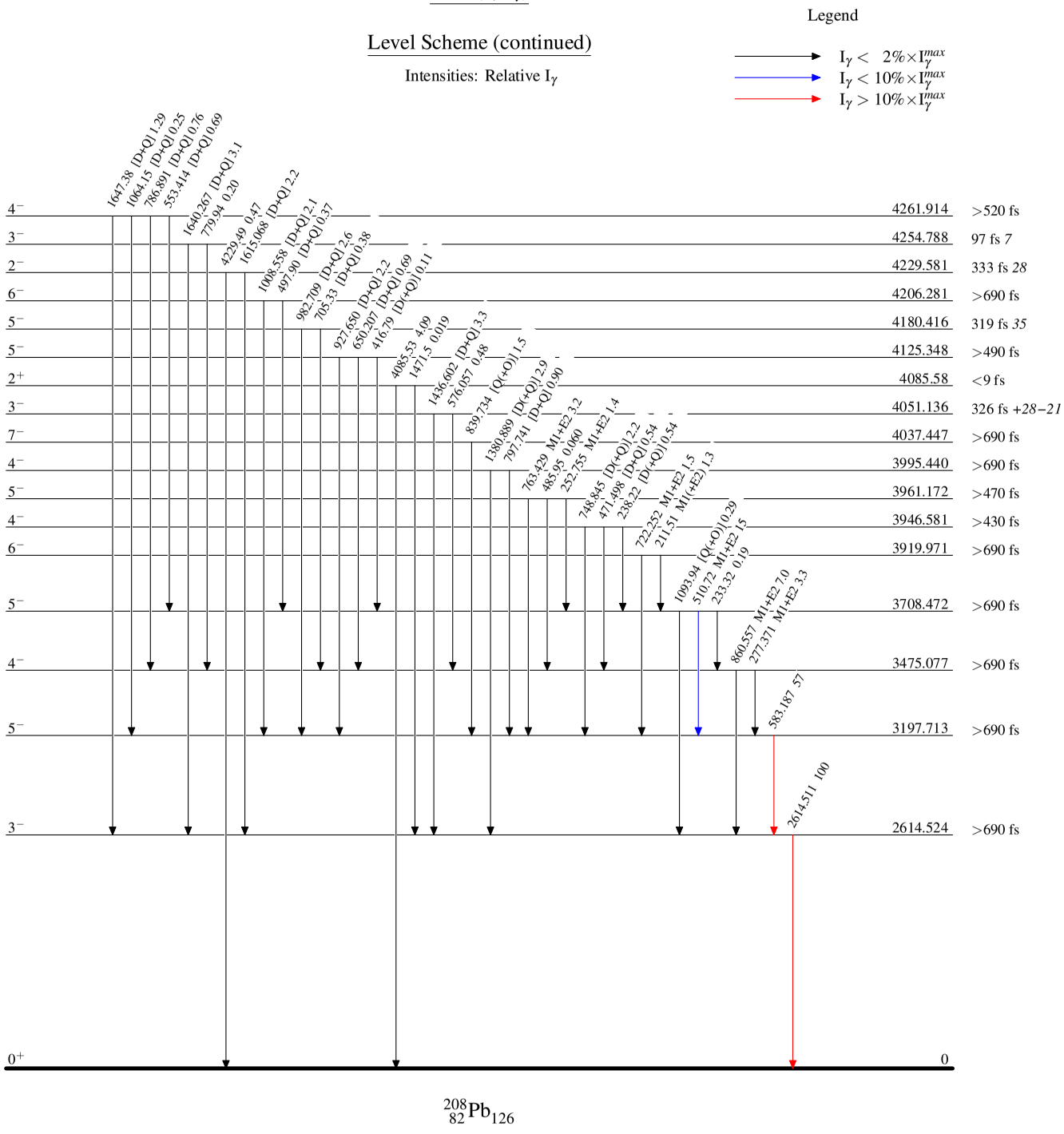


$^{208}_{82}Pb_{126}$

^{208}Pb(n,n′γ)

Level Scheme (continued)

Intensities: Relative I_γ



$^{208}_{82}Pb_{126}$