Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 113,1871 (2012)	15-Jun-2012

Q(β^-)=−1046.3 *24*; S(n)=7558.4 *23*; S(p)=8821 *10*; Q(α)=361 *4* 2012Wa38
Note: Current evaluation has used the following Q record −1046.3 24 *7558.4 22* 8821 10 *361* 4 2003Au03,2011AuZZ.
Q(β), S(n), Q(α) from 2011AuZZ (Q(β)=−1047.3 *23*, S(n)=7558.1 *21*, Q(α)=362 *4*, respectively, in 2003Au03).
For isotopes and/or isotope shift data, see, e.g., 1974Ba77, 1981Ho22, 1985Au04, 2006Av09.
Theory (partial list only):
2011Ra05 (level energies, B(E2) and staggering calculated for g.s., β and γ bands).
Interacting-boson-model calculation of collective structural evolution: 2011No15.

^{192}Os Levels

Band(Be) K=2 quasi-γ band (1993Os05,1996Wu07).
Band(Cf) K=4 band (1993Os05).

Cross Reference (XREF) Flags

A	^{192}Re β^- decay	H	^{192}Os(p,p′γ), (d,d′γ)	O	^{192}Os(γ,xn)
B	^{192}Os IT decay (5.9 s)	I	^{192}Os(n,n′γ)	P	Muonic atom
C	^{192}Ir ε decay (73.829 d)	J	^{192}Os(d,d′)	Q	^{192}Os(^{12}C,^{12}C′)
D	^{190}Os(t,p)	K	^{192}Os(α,α′)	R	^{192}Os(n,n′)
E	^{191}Os(n,γ) E=thermal	L	Coulomb excitation	S	^{198}Pt(^{136}Xe,Xγ)
F	^{192}Os(e,e′)	M	^{193}Ir(d,^{3}He)	T	^{192}Os(γ,γ′)
G	^{192}Os(p,p′), (pol p,p′)	N	^{193}Ir(t,α), (pol t,α)		

E(level)[†]	J$^\pi$[‡]	T$_{1/2}$[#]	XREF	Comments
0.0[a]	0+[b]	stable	ABCDEFGHIJKLMNOPQRST	T$_{1/2}$(2β^-)>9.8×10^{12} y (specific activity measurements, 1952Fr23, as reassessed by 1995Tr07 assuming Q(2β^-)=413 *3*). <r^2>$^{1/2}$(charge)=5.4127 *11* (2004An14).
205.79442[a] *9*	2+[b]	288 ps *4*	ABCDEFGHIJKLMN PQRST	μ=+0.792 *20*; Q=−0.96 *3* μ: IMPAC (1989Ra17; from 1985St05, 1973BaUA, 1972Si43, 1971Ki13, if T$_{1/2}$=289 ps *7*). See 1987St14, 1992St06, 2011StZZ for further evaluation/compilation of μ data. Q: Hyperfine structure of muonic x rays (1989Ra17 from 1981Ho22). Other values: −0.80 *18* and −0.86 *20* (Coulomb excitation reorientation; 1989Ra17, from 1983Ch35 and 1988Li22, respectively). β_2(nuclear)=0.14, β_2(Coulomb)=0.164 from (α,α′). J$^\pi$: E2 206γ to 0$^+$ g.s. T$_{1/2}$: other value: 300 ps *20* (Xγ(t) in ^{192}Ir ε decay (73.829 d), 1973Ch26).
489.0601 *6*	2+[c]	32.6 ps +*9*−*10*	ABCDEFGHIJKLMN PQR T	μ=+0.58 *4*; Q=−0.8 *3* μ: Transient field IPAC (1989Ra17, from 1985St05 and 1983Bo13); value relative to +0.792 *20* for ^{192}Os(205.8 level). Q: Coulomb excitation reorientation (1989Ra17, from 1980Ba42); value relative to −1.46 *4* for ^{188}Os(155 level). J$^\pi$: E2 489γ to 0$^+$ g.s.
580.2800[a] *8*	4+[b]	14.7 ps *4*	BCDEFGHIJKL N RS	μ=+1.56 *12*

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Adopted Levels, Gammas (continued)

^{192}Os Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$[#]	XREF	Comments
				B(E4)↑=0.043 *6* μ: transient field IPAC (1989Ra17, from 1985St05 and 1983Bo13); value relative to +0.792 *20* for ^{192}Os(205.8 level). B(E4): weighted average of 0.037 *4* and 0.048 *4* from (e,e′). β_4(nuclear)=−0.026 from (α,α′); E4 matrix element is −1960 e×fm^4 *110* from (pol p,p′). Jπ: E4 excitation in (e,e′); E2 374γ to 2$^+$ 206.
690.3705 *4*	3+[c]		BC E HI L N P	Jπ: M1+E2 110γ to 4$^+$ 580; M1+E2 485γ to 2$^+$ 206.
909.592 *7*	4+[c]	9.8 ps *4*	BC E GHIJKLMN	μ=+1.72 *36* μ: Transient field IPAC (1989Ra17, from 1985St05); value relative to +0.792 *20* for ^{192}Os(205.8 level). β_4(nuclear)=+0.005 from (α,α′); E4 matrix element is 1160 e×fm^4 *290* from (pol p,p′). Jπ: analyzing powers in ^{193}Ir(t,α), (pol t,α); evidence for 4$^+$ excitation in ^{192}Os(p,p′), (pol p,p′) and ^{192}Os(α,α′).
956.54[d] *3*	0+	10.3 ps +*10*−*11*	A D IJ L	Jπ: L=0 in ^{190}Os(t,p).
1069.541 *9*	4+	6.5 ps +*11*−*9*	B E GHIJKLMN	β_4(nuclear)=−0.010 from (α,α′); E4 matrix element is 1080 e×fm^4 *270* from (pol p,p′). Jπ: M1+E2 379γ to 3$^+$ 690; E4 excitation in ^{192}Os(p,p′), (pol p,p′) and ^{192}Os(α,α′).
1089.23[a] *7*	6+[b]	2.47 ps +*8*−*13*	B HIJ L S	Jπ: E2 509γ to 4$^+$; g.s. band member.
1127.51[d] *6*	(2+)		I L	Jπ: 1128γ to 0$^+$ g.s.; D+Q 639γ to 2$^+$ 489; D 437γ to 3$^+$ 690; band assignment.
1143.519 *15*	5+[c]		B E HI L	Jπ: γ′s to 3$^+$ and 4$^+$; band assignment.
1206.29 *20*	0+	35 ps *13*	D I L	Jπ: L=0 in ^{190}Os(t,p).
1341.162 *13*	3−	78 ps *10*	DEFGHIJKL N R	Jπ: E3 excitation in (e,e′) and Coulomb excitation. γ-ray branchings to 2$^+$, 3$^+$, and 4$^+$ levels in ^{192}Os(p,p′γ), (d,d′γ) fit Alaga rule for E1. $T_{1/2}$: from measured B(E3)↑=0.131 *9* from (e,e′) assuming 1341.4γ in (n,n′γ) deexcites this level. Note, however, that $T_{1/2}$=28 ps *4* if B(E3)↑=0.37 *4* (from Coulomb excitation) is assumed.
1362.016 *12*	(5+)		B E I L	Jπ: D+Q ΔJ=1 intraband 292γ to 4$^+$; band assignment.
1409.86 *6*	(2+)		I	Jπ: 1410γ to 0$^+$ g.s.; Q 830γ to 4$^+$ 580; D 719γ to 3$^+$ 690.
1450.31 *5*	(2+)		d I	Jπ: γ to 0$^+$; 870γ to 4$^+$ 580.
1456.6 *3*	(4+)		d I	Jπ: 968γ to 2$^+$ 490; 4$^+$ favored by γ(θ) and/or excit in (n,n′γ).
1465.34 *9*	6+[c]	2.73 ps +*36*−*21*	B E I L	Jπ: (E2) 556γ to 4$^+$; band assignment.
1560.6? *7*	(4−)		H	Jπ: possible gammas to 5$^+$ and 3$^-$; level systematics in neighboring even-even Os nuclei.
1591.75 *4*	(3)		I	
1612.87 *10*	(2+)		I N	Jπ: 1613γ to 0$^+$ g.s.; γ to 2$^+$; 2$^+$ favored in (n,n′γ).
1645.2 *6*	(6+)[@]		B L	Jπ: gammas to 6$^+$ and (5$^+$); band assignment.
1665.09 *9*	(1+,2+)		D I N	Jπ: 459γ to 0$^+$; 974γ to 3$^+$.
1708.39[a] *13*	8+[b]	0.81 ps *4*	B L S	Jπ: E2 619γ to 6$^+$; g.s. band member.
1712.91 *9*	7+[@]		B	Jπ: 624γ to 6$^+$; 569γ to (5$^+$); (E3) 302γ from (10$^-$) 2015.
1733.79 *12*	(2+)		I	

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Adopted Levels, Gammas (continued)

^{192}Os Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$#	XREF	Comments
1780.34 *11*	(2^+,3,4^+)		D I N	
1807.71 *11*	$2^{(+)}$		I N	Jπ: stretched Q 1227γ to 4^+ 580; D+Q 1602γ to 2^+ 206; D(+Q) 1117γ to 3^+ 690.
1826.51 *6*	1		d I	XREF: d(1833). Jπ: D 1826γ to 0^+ g.s.
1837.40 *11*	$(1,2)^+$		d I	XREF: d(1833). Jπ: D(+Q) 1349γ to 2^+ 489; 1837γ to 0^+ g.s.
1857.97 *8*	$(2,3)^+$		I	
1867.87 *12*	(2^+)		d I	XREF: d(1870). Jπ: D+Q 958γ to 2^+ 489; 958γ to 4^+ 910.
1868.70 *9*	(2,3)		d I	XREF: d(1870). Jπ: D+Q 741γ to (2^+) 1128.
1878.79 *8*	(2^+)		d I N	XREF: d(1870)N(1883).
1894.93 *17*	(3^+)		d I n	XREF: d(1897)n(1903).
1902.68 *9*	$(1,2)^+$		d I n	XREF: d(1897)n(1903).
1921.68 *15*	1,3		I	Jπ: D+Q ΔJ=1 1715γ to 2^+.
1924	0^+		D	Jπ: L=0 in ^{190}Os(t,p).
1936.9 *4*	(2^+)		I	
1940	(4^+)		d F n	B(E4)↑=1.6×10^{-3} *13* XREF: d(1945)n(1945). B(E4): from (e,e′). Jπ: from behavior of form factor at low momentum transfer in ^{192}Os(e,e′).
1940.80 *16*	(0^+,1,2)		d I n	XREF: d(1945)n(1945).
1947.77 *8*	(2)		d I n	XREF: d(1945)n(1945). Jπ: D+Q 257γ to 3^+ 690.
1951.54 *7*	(1,2^+)		d I n	XREF: d(1945)n(1945).
1960 *20*			M	
1968.01 *20*	(7^+)@		B L	Jπ: 606γ to (5^+) 1362; γ′s to (6^+); γ from (10^-) not M4.
1984.5 *4*	(1,2^+)		I	
1996.93 *10*	1		I	
2015.40 *11*	(10^-)	5.9 s *1*	B	%IT>87; %β^-<13 Identification: excitation functions for neutrons on ^{192}Os and absence of β^- activity (1973Pa21, 1979KaYT); decay to known levels in ^{192}Os (1965Bl12, 1973Pa21, 1979KaYT). %IT: only IT decay observed. %β^-<13 was deduced from Iβ/Iγ(205.8γ)<0.2 (1973Pa21). 1965Bl12 reported β^- activity with Eβ≈2.5 MeV, but results were never confirmed and are not consistent with Q(β^-). Jπ: (M2) 307γ to 8^+ 1708; level is most likely a 2-quasiparticle state with neutron configuration (9/2[505]+11/2[615]) (analogous to ^{190}Os (9.9 min) which has a similarly-hindered M2 transition to the J=8 member of the g.s. band). $T_{1/2}$: from IT decay (5.9 s) (1979KaYT). Other values: 6.2 s *8* (1965Bl12), 6.1 s *2* (1973Pa21).
2016 *8*			N	
2030 *20*			M	
2043.26 *19*			I	
2047.40 *6*	(1^+,2)		I	
2051.83 *11*	(2,3)		I N	Jπ: D+Q 1362γ to 3^+ 690.
2081.17 *12*	(1,2^+)		I	
2099.00 *10*	(2^+)		D I N	Jπ: D 1893γ to 2^+ 206.
2127.92 *17*			D I	

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Adopted Levels, Gammas (continued)

^{192}Os Levels (continued)

E(level)[†]	Jπ[‡]	$T_{1/2}$[#]	XREF	Comments
2133.9 *10*	8+[@]	1.34 ps *+16−20*	L	Jπ: (E2) 669γ to 1465 (6+); band assignment.
2147.15 *9*	(0+,1,2)		I	
2173.02 *11*	(1,2+)		I N	
2187.26 *8*	(2+,3)		I	
2208.36 *14*	(≤4)		I N	Jπ: 2003γ to 2+ 206.
2223.48 *9*			I	Jπ: 2018γ to 2+ 206, 1533γ to 3+ 690 so Jπ=(1+,2,3,4+).
2258.18 *20*			I N	Jπ: 1568γ to 3+ 690.
2275.32 *8*	(3,4+)		I N	Jπ: from excit in (n,n′γ); consistent with 1585γ to 3+ 690 and 2069γ to 2+ 206 which limit Jπ to (1+,2,3,4+).
2308.6 *20*	(2+,3,4)		I N	
2337.32 *8*	(1,2)		I N	Jπ: D+Q 2132γ to 2+ 206.
2358.88 *20*			I N	1669γ to 3+ 690.
2391.2[&] *10*	1[&]	104[&] fs *9*	N T	
2418.8[a] *10*	10+[b]	0.45 ps *+11−4*	L S	Jπ: E2 710γ to 1708 *8*+; g.s. band member.
2423 *8*			N	
2466 *8*			N	
2478.3 *7*	1	35 fs *13*	T	
2489 *8*			N	
2508 *8*			N	
2619 *8*			N	
2643 *8*			N	
2694.2[&] *7*	1[&]	31[&] fs *8*	N T	XREF: N(2686).
2748.3[&] *7*	1[&]	57[&] fs *14*	N T	XREF: N(2756).
2788 *8*			N	
2804.9[&] *10*	1[&]	66[&] fs *5*	T	
2814.3[&] *7*	1[&]	22[&] fs *4*	T	
2820.0[&] *10*	1[&]	123[&] fs *13*	T	
2864.5[&] *10*	1[&]	84[&] fs *6*	T	
2887 *8*			N	
2894.2 *15*	10+[@]		L	Jπ: (E2) 760γ to 2134 (8+); band assignment.
2903.5[&] *7*	1[&]	23.2[&] fs *16*	T	
2915.2[&] *7*	1[&]	10.4[&] fs *15*	N T	
2941.3[&] *10*	1[&]	91[&] fs *7*	n T	XREF: n(2947).
2948.0[&] *6*	1[&]	7.8[&] fs *5*	n T	XREF: n(2947).
2965.6[&] *10*	1[&]	95[&] fs *8*	T	
2978 *8*			N	
2986.8 *15*	(12+)		S	Jπ: tentative value suggested in ^{198}Pt(^{136}Xe,Xγ); 568γ to 10+ 2419.
3046.4[&] *6*	1[&]	11.3[&] fs *12*	T	
3088 *10*			N	
3103.8 *15*	(12+)	≥2.1 ps	L	Jπ: (E2) 685γ to 10+ 2419.
3148.9[&] *10*	1[&]	127[&] fs *14*	T	
3196.3[&] *10*	1[&]	62[&] fs *4*	T	
3207.0[&] *10*	1[&]	109[&] fs *13*	T	
3210.8[a] *15*	12+[b]		L	Jπ: 792γ to 2419 *10*+; band assignment.
3217.1[&] *10*	1[&]	69[&] fs *5*	T	
3239.9[&] *7*	1[&]	29[&] fs *5*	T	
3257.6[&] *10*	1[&]	123[&] fs *13*	T	

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Adopted Levels, Gammas (continued)

^{192}Os Levels (continued)

E(level)†	Jπ‡	$T_{1/2}$#	XREF	Comments
3273.3& *10*	1&	39.7& fs *24*	T	
3281.0& *10*	1&	72& fs *7*	T	
3289.5& *7*	1&	6.0& fs *7*	T	
3428.9& *7*	1&	28& fs *4*	T	
3536.4& *7*	1&	9.8& fs *25*	T	
3667.8 *18*	(14^+)		S	J^π: tentative value suggested in ^{198}Pt(^{136}Xe,Xγ); 681γ feeds (12^+) 2987.
3756.8& *10*	1&	38& fs *4*	T	
3836.5& *10*	1&	29& fs *3*	T	
3864.7& *10*	1&	71& fs *14*	T	
3890.5 *10*			T	
4113.8 *20*	(16^+)	0.19 μs *10*	S	%IT=100 E(level): assuming that the isomer decays directly by 446γ, but the possibility of a low-energy transition preceding the 446γ cannot be ruled out. J^π: tentative value suggested in ^{198}Pt(^{136}Xe,Xγ); 446γ feeds (14^+) 2987. $T_{1/2}$: (target-like recoil fragments)-γ(t) (2004Va03,2004Re11); 446γ-375γ pair and 681γ-568γ pair used as double γ gates.
12.68×10^3 *6*	1^-	2.49 MeV *23*	O	Component of GDR; $J^\pi=1^-$.
14.35×10^3 *12*	1^-	4.41 MeV *13*	O	Component of GDR; $J^\pi=1^-$.

† From least-squares fit to Eγ, omitting the 760.85γ, except where cross references clearly indicate other source.
‡ Values given without comment are based on excitation-function shapes and γ(θ) for set of π=+ states in ^{192}Os(n,n′γ) (1983Kl06); authors incorporated (t,α), (t,p), and (d,d′) information in finalizing J^π values.
# Deduced from measured B(E2) (adopted values, as reported in Coulomb excitation) and adopted γ-ray properties, except where noted.
@ Continuing J^π pattern established by band structure and coincidence data.
& From (γ,γ′).
[a] Band(A): K=0 g.s. band (1996Wu07).
[b] Based on smooth progression of level energies and independently established J^π(g.s.) and mult(374γ), definite J^π has been assigned to all members of the g.s. band.
[c] Based on smooth progression of level energies and independently established J^π(489) and mult(201γ), definite J^π has been assigned to all members of the γ band.
[d] Band(B): possible K=0 band (1993Os05).

γ(^{192}Os)

E_i(level)	J^π_i	E_γ†	I_γ#	E_f	J^π_f	Mult.‡	δ‡	α[h]	Comments
205.79442	2+	205.79430[c] 9	100[c]	0.0	0+	E2		0.302	B(E2)(W.u.)=62.1 7 B(E2)(W.u.): from measured B(E2)=2.043 22.
489.0601	2+	283.2668[c] 8	60.7[c] 6	205.79442	2+	M1+E2	−3.8 7	0.121 6	B(M1)(W.u.)=6.9×10^{-4} 24; B(E2)(W.u.)=46.0 +26−12 I_γ: from ε decay; consistent with 59 4 from IT decay, 54 6 from (n,γ) E=thermal and 63 8 from (n,n′γ) but not with 49 3 from Coulomb excitation or 94 from muonic atom. B(E2)(W.u.): from measured B(E2) (cf. 48.2 +22−21 assuming adopted $T_{1/2}$). Other δ: −3.2 +9−3 from Coulomb excitation.
		489.038[b] 13	100 3	0.0	0+	E2		0.0241	B(E2)(W.u.)=5.62 +21−12 E_γ: weighted average of 489.032 15 from (n,n′γ), 489.04 4 from (n,γ) E=thermal) and 489.06 3 from ε decay. B(E2)(W.u.): from measured B(E2). I_γ: from ^{192}Ir ε decay (73.829 d).
580.2800	4+	374.4852[c] 8	100[c]	205.79442	2+	E2		0.0484	B(E2)(W.u.)=75.6 20 B(E2)(W.u.): from measured B(E2).
690.3705	3+	110.33[c] 17	0.40[c] 2	580.2800	4+	M1+E2	0.52 +22−24	3.96 20	
		201.3112[c] 7	14.74[c] 16	489.0601	2+	M1+E2	−2.7 3	0.379 14	Other Iγ: 15.2 9 from IT decay, 15.3 22 from (n,n′γ), 17.2 17 from (n,γ) E=thermal.
		484.5751[c] 4	100.0[c] 3	205.79442	2+	M1+E2	−5.9 2	0.0259	
909.592	4+	219.24[a] 6	3.3 8	690.3705	3+	[M1,E2]		0.43 19	I_γ: weighted average of 3.2 16 from (n,γ) and 3.3 9 (n,n′γ).
		329.310[a] 9	28.6 17	580.2800	4+	M1+E2	−1.51 +13−22	0.110 8	B(M1)(W.u.)=0.0037 6; B(E2)(W.u.)=30.9 +36−18 Other Eγ: 329.09 15 from ε decay. I_γ: unweighted average of 25.2 8 from ε decay, 32 3 from (n,γ) E=thermal, 31 4 from (n,n′γ), 26 6 from IT decay (5.9 s). Other Iγ: 13.9 16 from Coulomb excitation. Mult.: D+Q from γγ(θ) in ε decay; not E1+M2 from RUL. δ: from Coulomb excitation. B(E2)(W.u.): from measured B(E2) in Coulomb excitation.
		420.530[a] 10	100[e] 5	489.0601	2+	E2		0.0354	B(E2)(W.u.)=45.2 +14−18 Mult.: from γ(θ) in (n,n′γ) and RUL. B(E2)(W.u.): from measured B(E2) in Coulomb excitation.
		703.94 12	7.7 7	205.79442	2+	E2		0.01031	B(E2)(W.u.)=0.29 3 E_γ: weighted average of 703.78 19 from ε decay, 704.03 14 from (n,n′γ), 703.96 10 from IT decay (5.9 s). I_γ: unweighted average of 7.7 10 from ε decay, 8.3 10

$^{192}_{76}Os_{116}$-6

$\gamma(^{192}Os)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[#]	E_f	J^π_f	Mult.[‡]	δ[‡]	α[h]	Comments
									from Coulomb excitation, 9 *3* from IT decay (59 s) and 5.7 *7* from (n,n′γ) (the weighted average is 6.9 *7*). Mult.: from $\gamma(\theta)$ in (n,n′γ) and RUL. B(E2)(W.u.): from measured B(E2); 0.26 *3* based on adopted $T_{1/2}$.
956.54	0^+	467.47 *3*	100 *9*	489.0601	2^+	[E2]		0.0270	B(E2)(W.u.)=30.4 *+30−23* B(E2)(W.u.): from measured B(E2) in Coulomb excitation.
		750.96 *15*	20 *3*	205.79442	2^+	[E2]		0.00896	B(E2)(W.u.)=0.57 *12*
1069.541	4^+	(159.9[d])	0.36 *6*	909.592	4^+	[E2]		0.724	B(E2)(W.u.)=24 *+6−7* B(E2)(W.u.): if this ΔJ=0 transition is purely E2. I_γ: from Coulomb excitation.
		379.154[a] *10*	69[@] *11*	690.3705	3^+	M1+E2	+3.3 *+15−12*	0.054 *10*	B(M1)(W.u.)=0.0019 *17*; B(E2)(W.u.)=56 *+14−15* δ: +0.15 *+4−6* or +3.3 *+15−12* from $\gamma(\theta)$ in (n,n′γ) (1983Kl06); the first option is inconsistent with measured B(E2) from Coulomb excitation. Mult.: D+Q from $\gamma(\theta)$ in (n,n′γ); not E1+M2 from RUL. B(E2)(W.u.) from adopted transition properties; B(E2)(W.u.)=58 *+8−16* from measured B(E2) in Coulomb excitation.
		580.43 *7*	100[@]	489.0601	2^+	(E2)		0.01593	B(E2)(W.u.)=10.6 *+18−21* E_γ: weighted average of 580.39 *10* from (n,γ) E=thermal, 580.46 *13* from IT decay (5.9 s) and 580.48 *13* from (n,n′γ). Mult.: from $\gamma(\theta)$ in (n,n′γ) and RUL.
		863.7[d]	15 *14*	205.79442	2^+	[E2]			B(E2)(W.u.)=0.22 *+21−10* I_γ: 15 *+14−7* from Coulomb excitation.
1089.23	6^+	508.97 *7*	100	580.2800	4^+	E2		0.0218	B(E2)(W.u.)=100 *+5−3* B(E2)(W.u.): from measured B(E2). Mult.: from Coulomb excitation.
1127.51	(2^+)	437.13 *9*	100 *9*	690.3705	3^+	(M1+E2)			B(E2)(W.u.)=1.10 *10* B(E2)(W.u.): from measured B(E2). Mult.: D+Q from $\gamma(\theta)$ in (n,n′γ); Δπ=(no) from level scheme.
		638.50 *14*	89 *6*	489.0601	2^+	(M1+E2)			B(E2)(W.u.)=0.41 *4* B(E2)(W.u.): from measured B(E2). Mult.: D+Q from $\gamma(\theta)$ in (n,n′γ); Δπ=(no) from level scheme.
		921.5 *3*	51 *6*	205.79442	2^+				
		1127.6 *3*	13.1 *10*	0.0	0^+	[E2]			
1143.519	5^+	233.92[&] *7*	3.3 *7*	909.592	4^+	[M1,E2]		0.35 *16*	I_γ: from IT decay (5.9 s). Other Iγ: 6 *3* from (n,γ) E=thermal.

$^{192}_{76}Os_{116}$-7

$\gamma(^{192}Os)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[#]	E_f	J^π_f	Mult.[‡]	α[h]	Comments
1143.519	5^+	453.10[&] 3	100 6	690.3705	3^+	[E2]	0.0292	I_γ: from IT decay (5.9 s).
		563.27[f] 7	19.0 26	580.2800	4^+	[M1,E2]	0.033 16	I_γ: unweighted average of 16.4 11 from IT decay (5.9 s) and 21.6 25 from (n,n′γ).
1206.29	0^+	1000.1 4	100	205.79442	2^+	[E2]		B(E2)(W.u.)=0.24 9 B(E2)(W.u.): from measured B(E2).
1341.162	3^-	271.584 13	98 10	1069.541	4^+	(E1+M2)		E_γ: weighted average of 271.584 13 from (n,n′γ) and 271.60 10 from (n,γ) E=thermal. Other Iγ: 58 4 and 47 8 from (p,p′γ), (d,d′γ). Mult.: D+Q from γ(θ) in (n,n′γ); Δπ=yes from level scheme.
		431.4 4	34 3	909.592	4^+	[E1]		B(E1)(W.u.)=4.0×10^{-6} 7
		650.81 15	12.8 11	690.3705	3^+	[E1]		B(E1)(W.u.)=4.4×10^{-7} 7 Other Iγ: 26 4 from (p,p′γ), (d,d′γ).
		852.19 2	100 5	489.0601	2^+	(E1)		B(E1)(W.u.)=1.53×10^{-6} 22 E_γ: fits placement poorly. Mult.: D from γ(θ) in (n,n′γ); Δπ=yes from level scheme.
		1135.5 3	28.2 15	205.79442	2^+	(E1)		B(E1)(W.u.)=1.8×10^{-7} 3 Other Iγ: 26 4 from (p,p′γ), (d,d′γ). Mult.: D from γ(θ) in (n,n′γ); Δπ=yes from level scheme.
		1341.4[i] 3	2.6 5	0.0	0^+	(E3)	0.00582	B(E3)(W.u.)=8.6 6 E_γ: γ expected based on direct excitation of parent level in (e,e′) and Coulomb excitation. Eγ=1341.4 3 in (n,n′γ) presumed to be this transition. Mult.: E3 excitation of 1351 level in (e,e′) and 1341 level in Coulomb excitation. B(E3)(W.u.): from measured B(E3)↑=0.131 9 (1988Bo08) from (e,e′). Other B(E3)↑: 0.37 4 from Coulomb excitation (implying B(E3)(W.u.)=24.1 26).
1362.016	(5^+)	218.488[a] 14	9.0 23	1143.519	5^+	[M1,E2]	0.43 19	Other Iγ: 7.1 from IT decay (5.9 s), 10 4 from (n,γ) E=thermal.
		292.478[a] 8	60 10	1069.541	4^+	(M1+E2)	0.19 9	Other Iγ: 111 9 in ^{192}Ir ε decay (73.829 d). Mult.: D+Q from γ(θ) in (n,n′γ) for intraband γ.
		452.2 10	100 17	909.592	4^+	[M1,E2]	0.06 3	E_γ: from IT decay (5.9 s). Other Eγ: 452.42 12 from (n,γ) E=thermal. Other Iγ: 100 57 from IT decay (5.9 s).
		671.54[f] 16	15.4 21	690.3705	3^+	[E2]	0.01144	Other Iγ: 33 9 from IT decay (5.9 s).
1409.86	(2^+)	719.25 17	55 4	690.3705	3^+	D		Mult.: from γ(θ) in (n,n′γ).
		829.63 8	34 3	580.2800	4^+	Q		Mult.: from γ(θ) in (n,n′γ).
		920.9 3	14 8	489.0601	2^+			
		1204.3 2	100 8	205.79442	2^+			
		1409.5 2	19 3	0.0	0^+			
1450.31	(2^+)	540.63 7	75 7	909.592	4^+			
		760.85 10	31 4	690.3705	3^+			E_γ: fits placement poorly; γ omitted from least-squares fit.
		870.10 8	100 5	580.2800	4^+			

From ENSDF

$^{192}_{76}Os_{116}$-8

$\gamma(^{192}Os)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[#]	E_f	J^π_f	Mult.[‡]	α[h]	Comments
1450.31	(2$^+$)	1244.8 *3*	98 *8*	205.79442	2$^+$			
		1450.40 *16*	32 *5*	0.0	0$^+$			
1456.6	(4$^+$)	967.5 *3*	100	489.0601	2$^+$			
1465.34	6$^+$	376.1[di]	7.1 *15*	1089.23	6$^+$	[E2]	0.0478	B(E2)(W.u.)=26.0 +*55*−*21* I_γ: 7.1 +*15*−*6* from Coulomb excitation. B(E2)(W.u.): from measured B(E2).
		555.75 *9*	100 *12*	909.592	4$^+$	(E2)	0.01765	B(E2)(W.u.)=52 +*3*−*6* E_γ: unweighted average of 555.75 *16* from ^{192}Os IT decay, 555.59 *10* from (n,γ) and 555.90 *10* from (n,n′γ). I_γ: 100 +*6*−*12* from Coulomb excitation. Mult.: from $\gamma(\theta)$ in (n,n′γ) and RUL. B(E2)(W.u.): from measured B(E2).
		884.8[d]	≤11	580.2800	4$^+$			I_γ: 1 +*10*−*1* from Coulomb excitation.
1560.6?	(4$^-$)	219.6[i]		1341.162	3$^-$			
		417[i]		1143.519	5$^+$			E_γ: possibly the unplaced 416.85 *13* transition seen in (n,n′γ).
1591.75	(3)	250.59 *3*	100 *15*	1341.162	3$^-$			
		901.31 *15*	65 *4*	690.3705	3$^+$			
		1011.1 *4*	13.2 *17*	580.2800	4$^+$			
		1102.7 *3*	51 *4*	489.0601	2$^+$			
1612.87	(2$^+$)	1124.1 *3*	100 *5*	489.0601	2$^+$			
		1406.92 *12*	50 *4*	205.79442	2$^+$			
		1613.0 *2*	13.4 *22*	0.0	0$^+$			
1645.2	(6$^+$)	283.2[d]		1362.016	(5$^+$)			
		575.5[&]		1069.541	4$^+$	[E2]	0.01625	
		735.6[di]		909.592	4$^+$			
1665.09	(1$^+$,2$^+$)	458.7 *2*	16 *5*	1206.29	0$^+$			
		708.2 *3*	10 *3*	956.54	0$^+$			
		974.1 *5*	19 *4*	690.3705	3$^+$			
		1176.4 *3*	100 *10*	489.0601	2$^+$			
		1459.33 *10*	82 *6*	205.79442	2$^+$	D		Mult.: from $\gamma(\theta)$ in (n,n′γ).
1708.39	8$^+$	619.3[&] *3*	100[&]	1089.23	6$^+$	E2	0.01372	B(E2)(W.u.)=115 *6* Mult.: from Coulomb excitation.
1712.91	7$^+$	247.5[&]	0.75[&]	1465.34	6$^+$	[M1,E2]	0.30 *14*	
		569.36[&] *9*	100[&] *9*	1143.519	5$^+$	[E2]	0.01667	
		624.0[&] *4*	1.9[&] *4*	1089.23	6$^+$	[M1,E2]	0.025 *12*	
1733.79	(2$^+$)	824.23 *16*	15 *3*	909.592	4$^+$			
		1043.7 *4*	100 *7*	690.3705	3$^+$			
		1153.8 *5*	19 *4*	580.2800	4$^+$			
		1527.84 *18*	32 *5*	205.79442	2$^+$			

From ENSDF

$^{192}_{76}Os_{116}$-9

Adopted Levels, Gammas (continued)

γ(^{192}Os) (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[#]	E_f	J^π_f	Mult.[‡]	α[h]	Comments
1780.34	(2+,3,4+)	370.46 *18*	100 *41*	1409.86	(2+)			
		1089.9 *4*	19 *3*	690.3705	3+	D(+Q)		Mult.: from γ(θ) in (n,n′γ).
		1200.1 *2*	16 *6*	580.2800	4+			
		1291.4 *2*	48 *4*	489.0601	2+			
		1574.3 *3*	11 *3*	205.79442	2+			
1807.71	2(+)	1117.2 *3*	45 *4*	690.3705	3+	D(+Q)		Mult.: from γ(θ) in (n,n′γ).
		1227.4 *2*	26.5 *25*	580.2800	4+	Q		Mult.: from γ(θ) in (n,n′γ).
		1318.70 *16*	100 *6*	489.0601	2+			
		1601.9 *3*	14.1 *18*	205.79442	2+	D+Q		Mult.: from γ(θ) in (n,n′γ).
1826.51	1	1337.77 *16*	28 *4*	489.0601	2+	D		
		1620.95 *12*	55 *6*	205.79442	2+	D		Mult.: from γ(θ) in (n,n′γ).
		1826.36 *7*	100 *6*	0.0	0+	D		Mult.: from γ(θ) in (n,n′γ).
1837.40	(1,2)+	1146.7 *5*	33 *7*	690.3705	3+			
		1348.59 *17*	100 *11*	489.0601	2+	D(+Q)		Mult.: from γ(θ) in (n,n′γ).
		1837.22 *15*	66 *9*	0.0	0+			
1857.97	(2,3)+	788.42 *8*	100 *6*	1069.541	4+			
		948.2 *3*	24 *3*	909.592	4+			
		1167.9 *3*	27 *3*	690.3705	3+			
1867.87	(2+)	958.3 *4*	22 *5*	909.592	4+			
		1378.80 *12*	100 *8*	489.0601	2+	D+Q		Mult.: from γ(θ) in (n,n′γ).
1868.70	(2,3)	741.04 *12*	100 *7*	1127.51	(2+)	D+Q		Mult.: from γ(θ) in (n,n′γ).
		1663.05 *12*	41 *4*	205.79442	2+			
1878.79	(2+)	809.28 *10*	21 *3*	1069.541	4+			
		1389.68 *11*	100 *6*	489.0601	2+			
1894.93	(3+)	986.0 *4*	84 *5*	909.592	4+	D		Mult.: from γ(θ) in (n,n′γ).
		1314.51 *18*	100 *11*	580.2800	4+			
1902.68	(1,2)+	1413.75 *15*	100 *9*	489.0601	2+			
		1697.46 *16*	93 *16*	205.79442	2+			E_γ: fits placement poorly.
		1902.02 *15*	69 *9*	0.0	0+			E_γ: fits placement poorly.
1921.68	1,3	1432.5 *3*	56 *10*	489.0601	2+			
		1715.92 *17*	100 *12*	205.79442	2+	D+Q		Mult.: from γ(θ) in (n,n′γ).
1936.9	(2+)	980.4 *4*	100	956.54	0+			
1940.80	(0+,1,2)	1735.00 *16*	100	205.79442	2+			
1947.77	(2)	334.6 *3*	33 *10*	1612.87	(2+)			
		820.32 *17*	8.7 *20*	1127.51	(2+)			
		1257.3 *2*	38 *3*	690.3705	3+	D+Q		Mult.: from γ(θ) in (n,n′γ).
		1742.00 *10*	100 *7*	205.79442	2+			
1951.54	(1,2+)	1746.08 *15*	66 *9*	205.79442	2+			
		1951.43 *8*	100 *21*	0.0	0+			
1968.01	(7+)	322.7[&]	13.3[&]	1645.2	(6+)	[M1,E2]	0.14 *7*	
		502.5[&]	9.3[&]	1465.34	6+	[M1,E2]	0.044 *22*	

From ENSDF

$^{192}_{76}Os_{116}$-10

$\gamma(^{192}Os)$ (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[#]	E_f	J^π_f	Mult.[‡]	α[h]	Comments
1968.01	(7+)	606.0[&] 2	100[&] 27	1362.016	(5+)	[E2]	0.01442	
1984.5	(1,2+)	1028.0 4	100	956.54	0+			
1996.93	1	1040.5 4	30 3	956.54	0+			
		1996.91 10	100 7	0.0	0+	D		Mult.: from γ(θ) in (n,n′γ).
2015.40	(10−)	(47.4[&] 2)	0.0031[&] 6	1968.01	(7+)	[E3]	7.56×10³ 22	B(E3)(W.u.)=0.0026 6 Mult.: not M4 from RUL.
		302.48[&] 6	100[&] 6	1712.91	7+	(E3)[&]	0.426	B(E3)(W.u.)=1.98×10⁻⁴ 22
		307.02[&] 9	13.3[&] 10	1708.39	8+	(M2)[&]	0.941	B(M2)(W.u.)=3.8×10⁻⁹ 5
2043.26		916.0 2	100 11	1127.51	(2+)			
		1553.2 4	44 6	489.0601	2+			
2047.40	(1+,2)	1357.4 2	21 4	690.3705	3+			
		1558.16 9	100 6	489.0601	2+			
		1841.66 7	58 6	205.79442	2+			
2051.83	(2,3)	1361.51 14	100 8	690.3705	3+	D+Q		Mult.: from γ(θ) in (n,n′γ).
		1562.68 18	85 11	489.0601	2+			
2081.17	(1,2+)	1875.52 15	100 11	205.79442	2+			
		2080.91 19	69 5	0.0	0+			
2099.00	(2+)	1893.20 10	100	205.79442	2+	D		Mult.: from γ(θ) in (n,n′γ).
2127.92		1922.12 17	100	205.79442	2+			
2133.9	8+	668.6[d]	100	1465.34	6+	(E2)	0.01155	B(E2)(W.u.)=47 +7−6 Mult.: from Coulomb excitation.
2147.15	(0+,1,2)	1020.2 4	66 6	1127.51	(2+)			
		1941.32 9	100 6	205.79442	2+			
2173.02	(1,2+)	1967.26 13	100 9	205.79442	2+			
		2172.9 2	44 5	0.0	0+			
2187.26	(2+,3)	1607.00 9	100 15	580.2800	4+			
		1981.38 16	24 3	205.79442	2+			
2208.36	(≤4)	2002.55 14	100	205.79442	2+			
2223.48		1532.9 12	4.4 22	690.3705	3+			
		2017.68 9	100 3	205.79442	2+			
2258.18		1567.8 2	100	690.3705	3+			
2275.32	(3,4+)	1584.95 9	100 4	690.3705	3+			
		2069.48 14	57 7	205.79442	2+			
2308.6	(2+,3,4)	1399 2	100	909.592	4+			
2337.32	(1,2)	2131.51 8	100	205.79442	2+	D+Q		Mult.: from γ(θ) in (n,n′γ).
2358.88		1668.5 2	100	690.3705	3+			
2391.2	1	2391.2[g]	100[g]	0.0	0+	D		If M1, B(M1)(W.u.)=0.0155 14; if E1, B(E1)(W.u.)=0.000143 13.
2418.8	10+	710.4[d]	100	1708.39	8+	E2	0.01011	B(E2)(W.u.)=105 +10−26 Mult.: from Coulomb excitation.
2478.3	1	2272.5[g]	100[g] 24	205.79442	2+			

$^{192}_{76}Os_{116}$-11

$\gamma(^{192}Os)$ (continued)

E_i(level)	J_i^π	E_γ[†]	I_γ[#]	E_f	J_f^π	Mult.[‡]	α[h]	Comments
2478.3	1	2478.3[g]	56[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.015 *6*; if E1, B(E1)(W.u.)=0.00014 *6*.
2694.2	1	2488.4[g]	100[g] *18*	205.79442	2^+			
		2694.2[g]	66[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.014 *4*; if E1, B(E1)(W.u.)=0.00013 *4*.
2748.3	1	2542.5[g]	75[g] *18*	205.79442	2^+			
		2748.3[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.011 *3*; if E1, B(E1)(W.u.)=0.00010 *3*.
2804.9	1	2804.9[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0151 *12*; if E1, B(E1)(W.u.)=0.000140 *11*.
2814.3	1	2608.5[g]	143[g] *20*	205.79442	2^+			
		2814.3[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.018 *4*; if E1, B(E1)(W.u.)=0.00017 *4*.
2820.0	1	2820.0[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0080 *9*; if E1, B(E1)(W.u.)=7.4×10^{-5} *8*.
2864.5	1	2864.5[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0112 *8*; if E1, B(E1)(W.u.)=0.000103 *8*.
2894.2	10^+	760.3[d]	100	2133.9	8^+	(E2)		Mult.: from Coulomb excitation.
2903.5	1	2414.4[g]	12[g] *3*	489.0601	2^+			
		2903.5[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.035 *3*; if E1, B(E1)(W.u.)=0.000320 *24*.
2915.2	1	2709.4[g]	100[g] *9*	205.79442	2^+			
		2915.2[g]	47[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.027 *5*; if E1, B(E1)(W.u.)=0.00025 *4*.
2941.3	1	2941.3[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0095 *8*; if E1, B(E1)(W.u.)=8.8×10^{-5} *7*.
2948.0	1	2458.9[g]	11.6[g] *25*	489.0601	2^+			
		2742.2[g]	47.0[g] *23*	205.79442	2^+			
		2948.0[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.069 *5*; if E1, B(E1)(W.u.)=0.00064 *5*.
2965.6	1	2965.6[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0089 *8*; if E1, B(E1)(W.u.)=8.2×10^{-5} *7*.
2986.8	(12^+)	568	100	2418.8	10^+			E_γ: from $^{198}Pt(^{136}Xe,X\gamma)$.
3046.4	1	2557.3[g]	26[g] *7*	489.0601	2^+			
		2840.6[g]	79[g] *6*	205.79442	2^+			
		3046.4[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.034 *4*; if E1, B(E1)(W.u.)=0.00031 *4*.
3103.8	(12^+)	685[d]	100	2418.8	10^+	(E2)	0.01094	B(E2)(W.u.)<27 Mult.: from Coulomb excitation.
3148.9	1	3148.9[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0056 *7*; if E1, B(E1)(W.u.)=5.1×10^{-5} *6*.
3196.3	1	3196.3[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0109 *7*; if E1, B(E1)(W.u.)=0.000100 *7*.
3207.0	1	3207.0[g]	100[g]	0.0	0^+			
3210.8	12^+	792[d]	100	2418.8	10^+			
3217.1	1	3217.1[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0096 *7*; if E1, B(E1)(W.u.)=8.8×10^{-5} *7*.
3239.9	1	3034.1[g]	77[g] *11*	205.79442	2^+			
		3239.9[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0126 *24*; if E1, B(E1)(W.u.)=0.000116 *22*.
3257.6	1	3257.6[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0052 *6*; if E1, B(E1)(W.u.)=4.8×10^{-5} *5*.
3273.3	1	3273.3[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0158 *10*; if E1, B(E1)(W.u.)=0.000146 *9*.
3281.0	1	3281.0[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0087 *9*; if E1, B(E1)(W.u.)=8.0×10^{-5} *8*.

Adopted Levels, Gammas (continued)

γ(^{192}Os) (continued)

E_i(level)	J^π_i	E_γ[†]	I_γ[#]	E_f	J^π_f	Mult.[‡]	α[h]	Comments
3289.5	1	3083.7[g]	100[g] *7*	205.79442	2^+			
		3289.5[g]	51[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.035 *5*; if E1, B(E1)(W.u.)=0.00032 *4*.
3428.9	1	3223.1[g]	44[g] *8*	205.79442	2^+			
		3428.9[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0135 *20*; if E1, B(E1)(W.u.)=0.000125 *18*.
3536.4	1	3330.6[g]	100[g] *16*	205.79442	2^+			
		3536.4[g]	41[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.015 *4*; if E1, B(E1)(W.u.)=0.00014 *4*.
3667.8	(14^+)	681	100	2986.8	(12^+)			E_γ: from ^{198}Pt(^{136}Xe,Xγ).
3756.8	1	3756.8[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0109 *12*; if E1, B(E1)(W.u.)=0.000101 *11*.
3836.5	1	3836.5[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0134 *14*; if E1, B(E1)(W.u.)=0.000124 *13*.
3864.7	1	3864.7[g]	100[g]	0.0	0^+	D		If M1, B(M1)(W.u.)=0.0054 *11*; if E1, B(E1)(W.u.)=5.0×10^{-5} *10*.
3890.5		3890.5[g]	100[g]	0.0	0^+			
4113.8	(16^+)	446	100	3667.8	(14^+)	[E2]	0.0304	B(E2)(W.u.)=0.0025 *14* E_γ: from ^{198}Pt(^{136}Xe,Xγ).

† From (n,n′γ), except as noted.

‡ From ^{192}Ir ε decay (73.827 d), except where noted.

Relative photon branching from each level; values are from ^{192}Os(n,n′γ), unless noted to the contrary.

@ Iγ(379)/Iγ(580)=0.50 *15*, 0.73 *18*, 0.89 *12*, 1.10 *18*, 0.42 *12* and 0.51 *17*, respectively, from IT decay, (n,γ), (n,n′γ), (d,d′γ), (p,p′γ) and Coulomb excitation. The unweighted average of all data (viz., 0.69 *11*) is adopted; the weighted average is 0.67 *11*.

& From ^{192}Os IT decay (5.9 s).

a From ^{191}Os(n,γ) E=thermal.

b Weighted average from ^{192}Ir ε decay (73.827 d), (n,n′γ) and (n,γ).

c From ^{192}Ir ε decay (73.827 d).

d From Coulomb excitation.

e Weighted average from ^{192}Ir ε decay (73.827 d), ^{192}Os IT decay (5.9 s), ^{191}Os(n,γ) E=thermal, ^{192}Os(n,n′γ).

f Weighted average from ^{192}Os IT decay and (n,n′γ).

g From (γ,γ′). Eγ is from level energy difference.

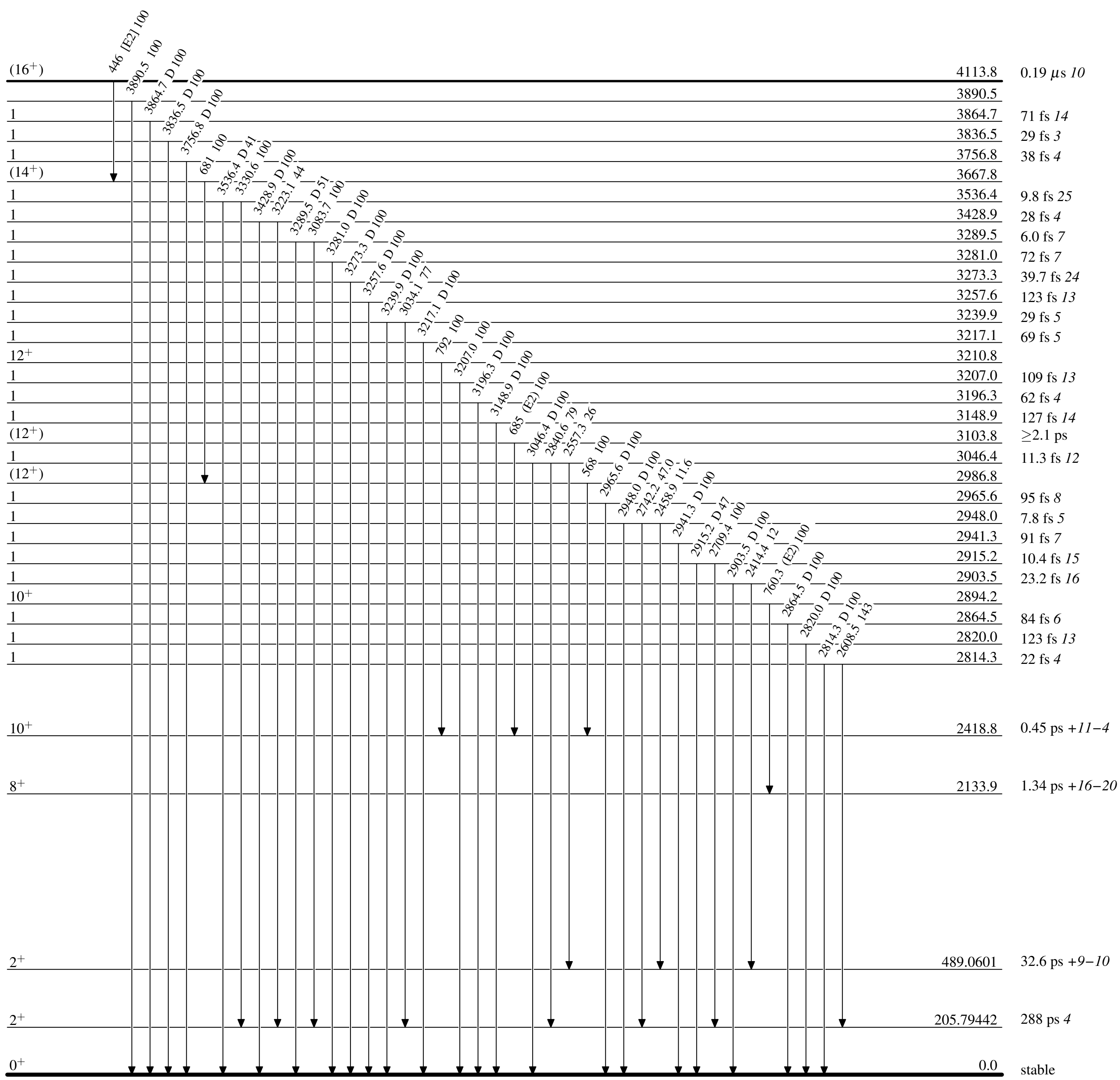
h Total theoretical internal conversion coefficients, calculated using the BrIcc code (2008Ki07) with Frozen orbital approximation based on γ-ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

i Placement of transition in the level scheme is uncertain.

Adopted Levels, Gammas

Level Scheme

Intensities: Relative photon branching from each level

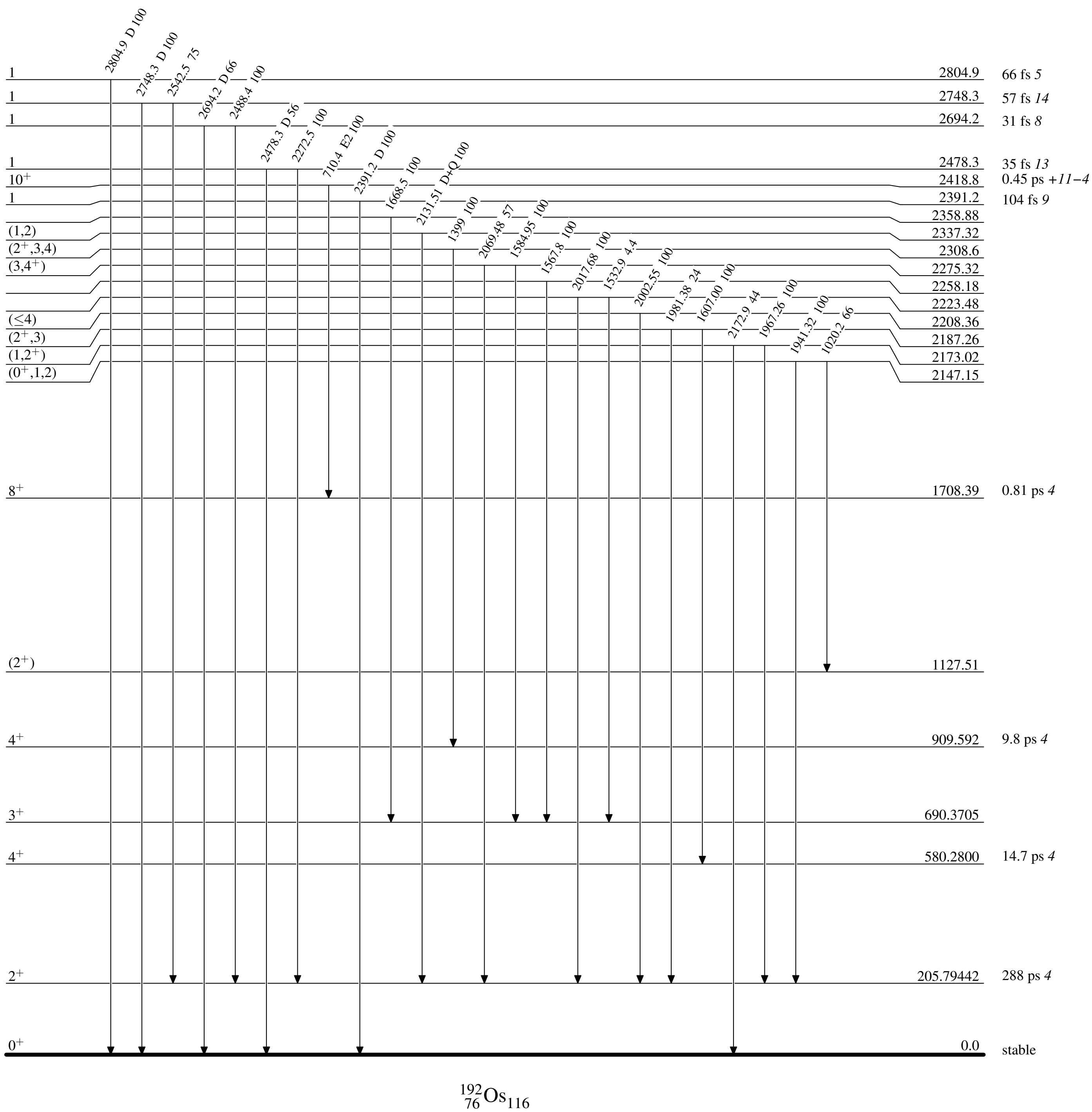


$^{192}_{76}Os_{116}$

Adopted Levels, Gammas

Level Scheme (continued)

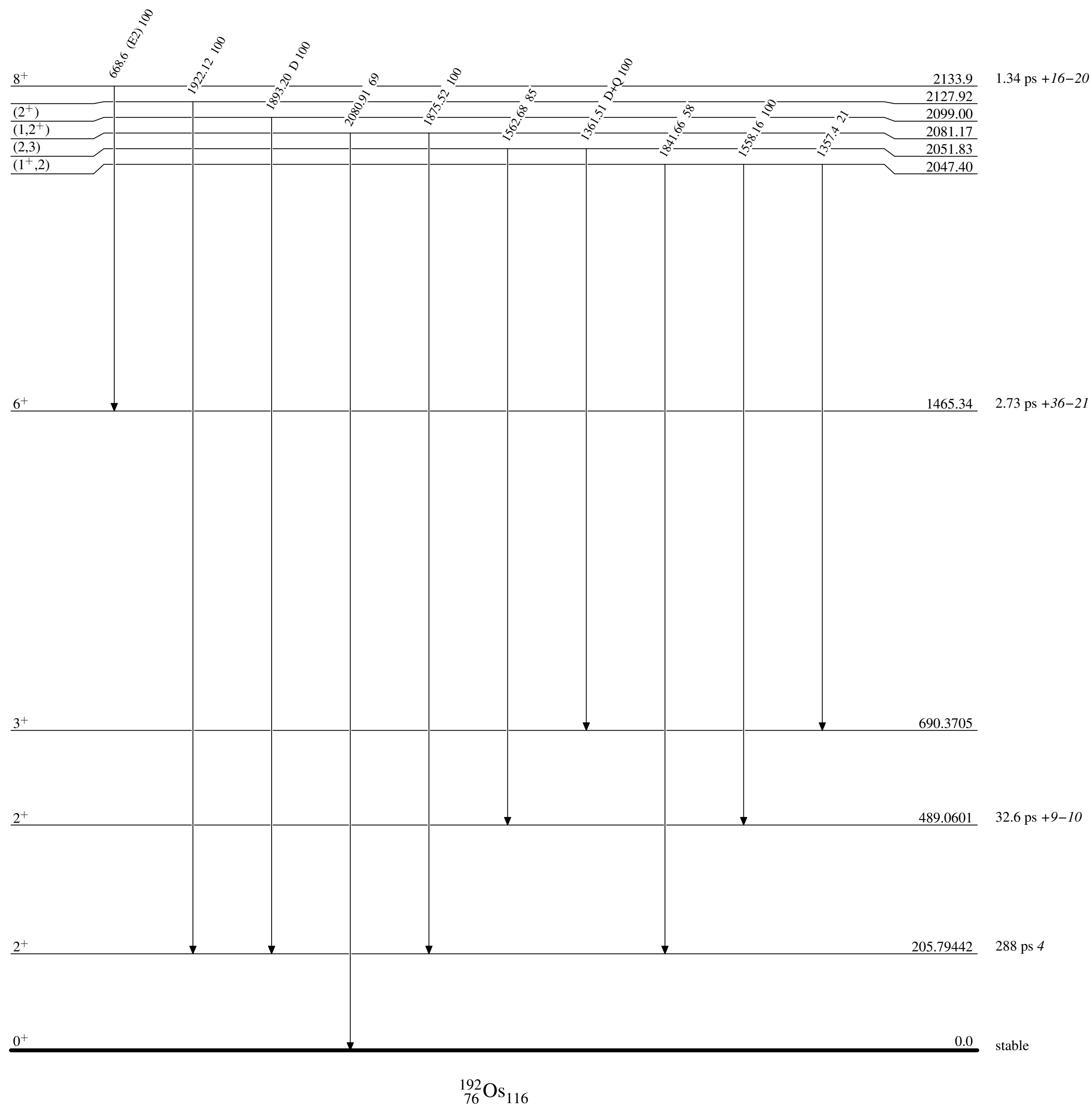
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

Level Scheme (continued)

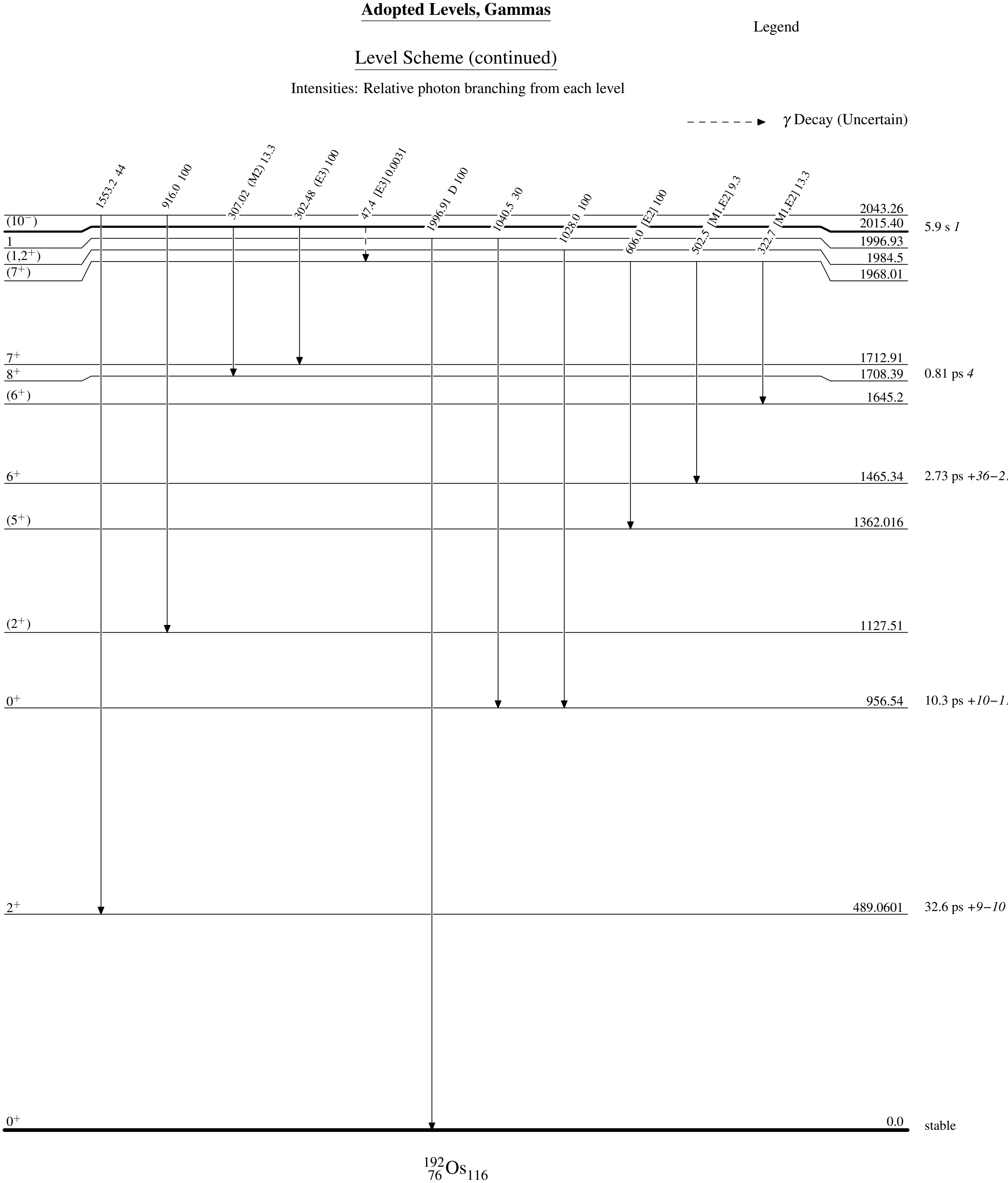
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

Level Scheme (continued)

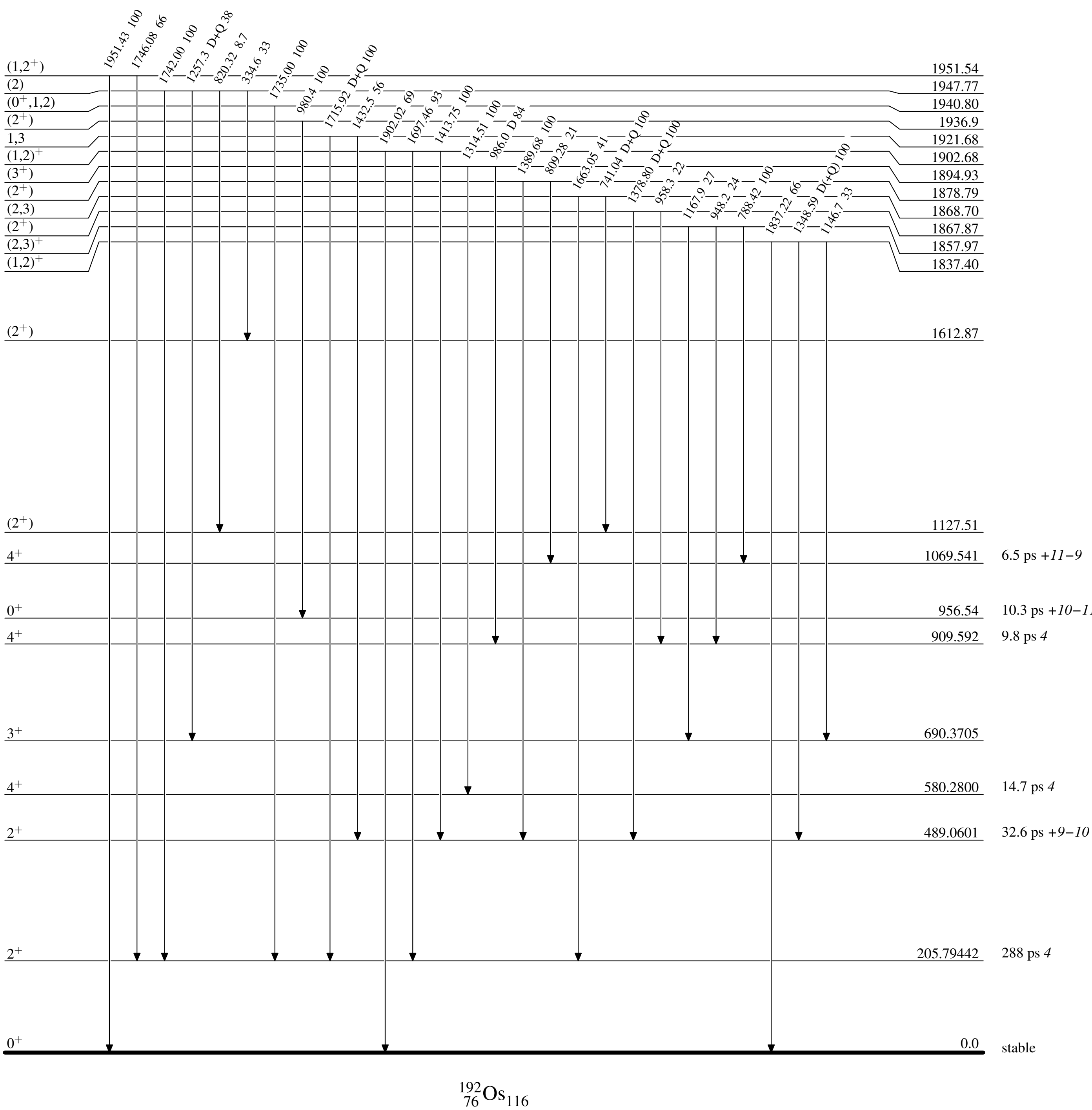
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

Level Scheme (continued)

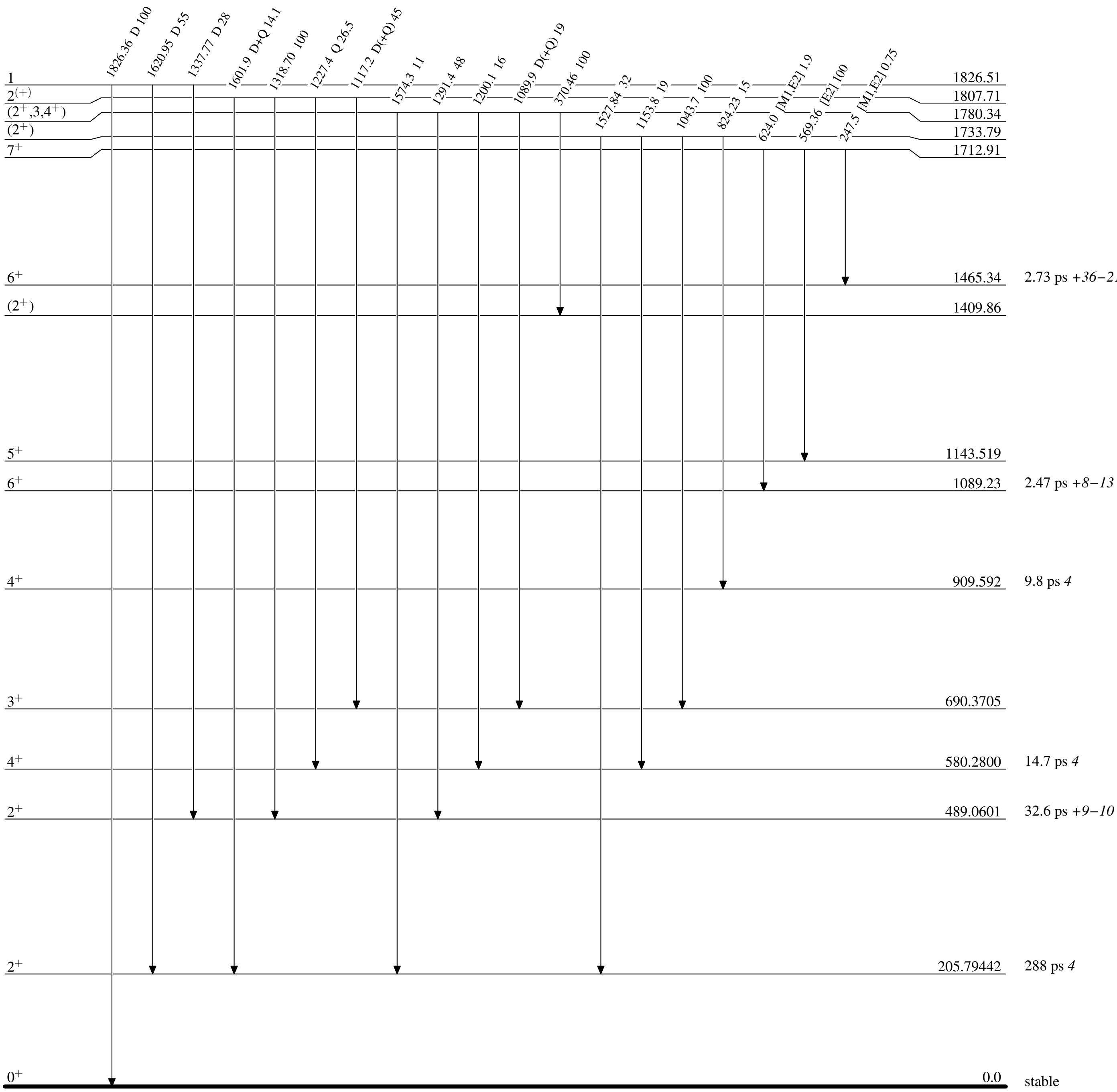
Intensities: Relative photon branching from each level



Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level

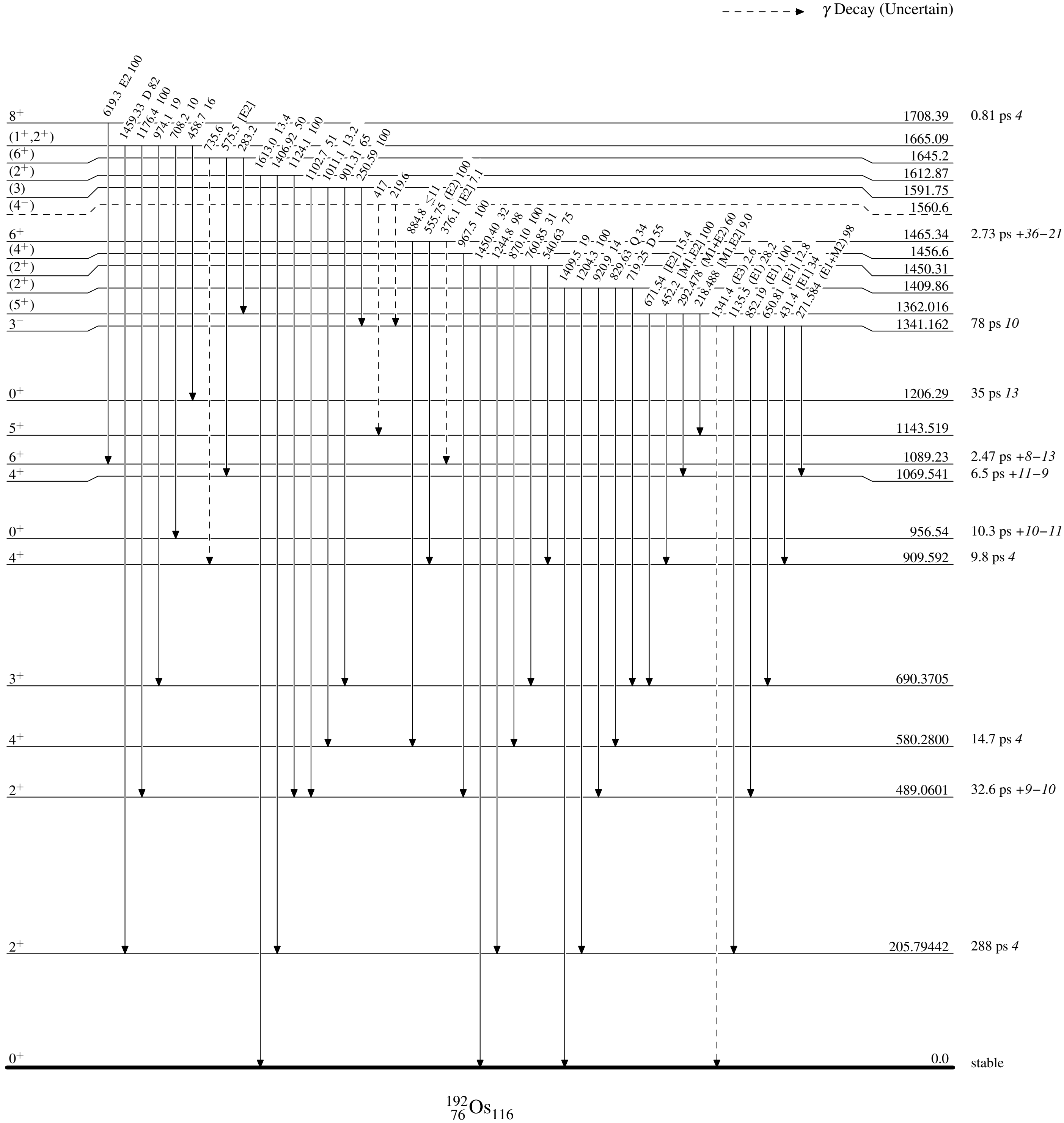


$^{192}_{76}Os_{116}$

Adopted Levels, Gammas

Level Scheme (continued)

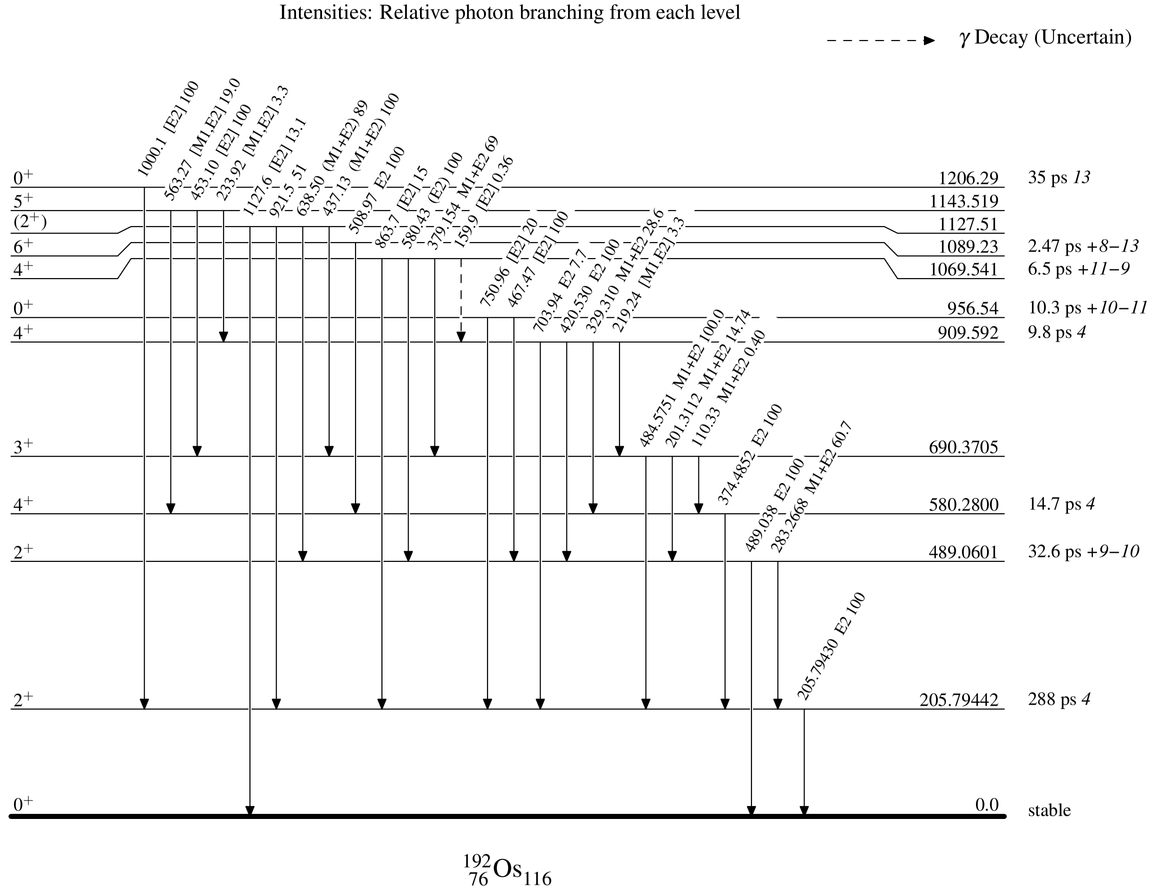
Intensities: Relative photon branching from each level



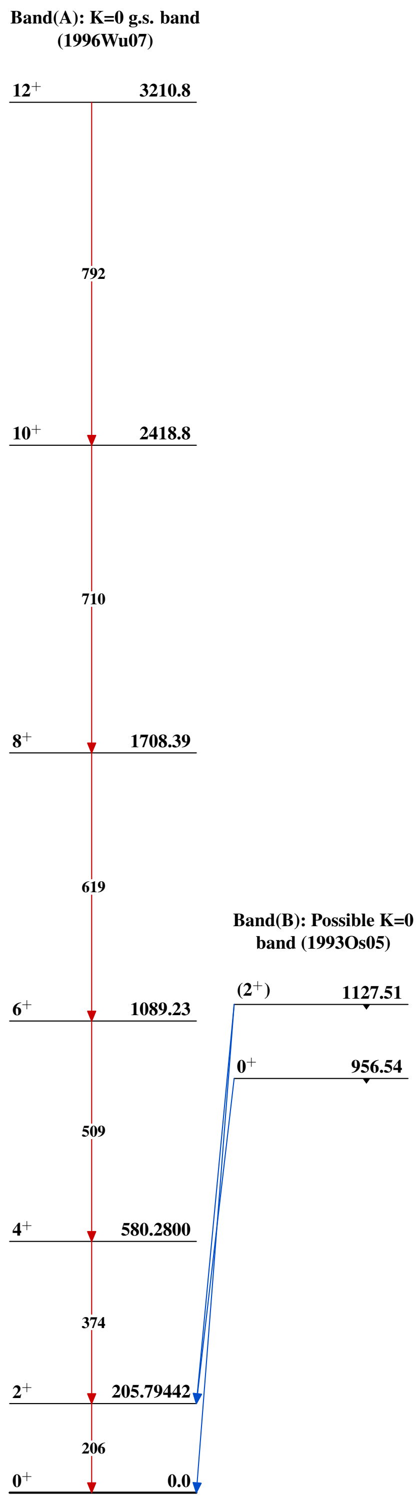
Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level



Adopted Levels, Gammas



$^{192}_{76}Os_{116}$