

Adopted Levels, Gammas

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	Coral M. Baglin	NDS 110,265 (2009)	15-Nov-2008

Q(β⁻)=-4940 20; S(n)=7547 22; S(p)=4.65×10³ 4; Q(α)=4.19×10³ 4 [2012Wa38](#)

Note: Current evaluation has used the following Q record -4943 217545 244660 304190 30 [2003Au03](#).

¹⁷⁹Os Levels

Cross Reference (XREF) Flags

A	¹⁶⁷ Er(¹⁶ O,4nγ)	D	¹⁵⁴ Sm(³⁰ Si,5nγ)
B	¹⁸³ Pt α decay (6.5 min)	E	¹⁵⁰ Nd(³⁴ S,5nγ)
C	¹⁷⁹ Ir ε decay		

E(level) [†]	J ^{π‡}	T _{1/2}	XREF	Comments
0.0 ^h	1/2 ^{-j}	6.5 min 3	ABCDE	%ε+%β ⁺ =100 T _{1/2} : weighted average of 6.3 min 3 (1976Be62), 6.5 min 5 (1973GoYJ), 9 min 2 (1971NaZV), and 8 min 1 (1968Be43). Others: 1972Be89 , 1970Ar15 . J ^π : unhindered α decay (HF=1.2) from 1/2 ⁻ ¹⁸³ Pt g.s.
86.31 ⁱ 8	3/2 ^{-j}		A CDE	J ^π : M1+E2 intraband 86γ to 1/2 ⁻ g.s.
100.21 ^h 9	5/2 ^{-j}		A CDE	J ^π : (E2) 100γ to 1/2 ⁻ g.s.; continuation of 1/2 ⁻ band.
115.4 ^f 8	(5/2 ⁻)		DE	J ^π : band assignment.
145.41 ^e 12	(7/2 ⁻)	0.50 μs	A CDE	J ^π : M1 45γ to 5/2 ⁻ 100; band assignment. 7/2[514] Nilsson orbital assigned by analogy with ¹⁸¹ Os. T _{1/2} of this level is consistent with the degree of K-forbiddenness of the transition to the J ^π =(5/2 ⁻) member of the 1/2[521] g.s. rotational band. T _{1/2} : from γγ(t), gating on transitions above and below the 146 level, and from two-component fits to 86.3γ and 100.3γ time spectra in n-γ(t) in (¹⁶ O,4nγ) (1983Dr05).
195.9 ^c 9	(5/2 ⁻)		D	J ^π : 211γ to 3/2 ⁻ 86; band assignment.
210.8 ^g 7	(7/2 ⁻)		DE	J ^π : intraband M1 95γ to (5/2 ⁻) 115; band assignment.
243.0 ^a 8	(9/2 ⁺)	0.783 μs 14	A CDE	J ^π : E1 98γ to (7/2 ⁻) 145; band assignment. T _{1/2} : From n-97.5γ(t) in (¹⁶ O,4nγ).
273.10 ^d 15	(9/2 ⁻)		A CDE	J ^π : intraband D+Q 128γ to (7/2 ⁻) 145.
286.6 ^b 9	(11/2 ⁺)		A DE	J ^π : intraband 44γ to (9/2 ⁺) 243; band assignment.
296.4 ⁱ 3	7/2 ^{-j}		DE	J ^π : stretched Q intraband 210γ to 3/2 ⁻ 86 level.
320.20 ^h 18	9/2 ^{-j}		A CDE	J ^π : intraband Q 220γ to 5/2 ⁻ 100.
336.6 ^f 7	(9/2 ⁻)		DE	J ^π : intraband gammas to (7/2 ⁻) 211 and (5/2 ⁻) 115.
345.0 ^a 9	(13/2 ⁺)		A DE	J ^π : intraband gammas to (11/2 ⁺) 287 and (9/2 ⁺) 243.
424.50 ^e 23	(11/2 ⁻)		A DE	J ^π : intraband D+Q 151γ to (9/2 ⁻) 273; intraband Q 279γ to (7/2 ⁻) 145.
436.5 ^c 11	(9/2 ⁻)		D	J ^π : intraband Q 241γ to (5/2 ⁻) 196.
487.3 ^g 7	(11/2 ⁻)		DE	J ^π : intraband D+Q 151γ to (9/2 ⁻) 337; intraband Q 277γ to (7/2 ⁻) 211.
500.1 ^b 9	(15/2 ⁺)		A DE	J ^π : intraband D+Q 155γ to (13/2 ⁺) 345; intraband Q 214γ to (11/2 ⁺) 287.
589.6 ^a 9	(17/2 ⁺)		A DE	J ^π : intraband 89γ to (15/2 ⁺) 500; intraband Q 245γ to (13/2 ⁺) 345.
594.2 ^d 3	(13/2 ⁻)		A DE	J ^π : intraband D+Q 170γ to (11/2 ⁻) 425; intraband Q 321γ to (9/2 ⁻) 273.
607.4 ⁱ 4	11/2 ^{-j}		DE	
641.4 ^h 4	13/2 ^{-j}		A DE	
662.9 ^f 6	(13/2 ⁻)		DE	J ^π : intraband D+Q 176γ to (11/2 ⁻) 487; intraband Q 326γ to (9/2 ⁻) 337.
781.4 ^e 3	(15/2 ⁻)		A DE	J ^π : intraband D+Q 187γ to (13/2 ⁻) 594; intraband Q 357γ to (11/2 ⁻) 425.
788.2 ^c 12	(13/2 ⁻)		D	
856.1 ^b 9	(19/2 ⁺)		A DE	

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Adopted Levels, Gammas (continued) ^{179}Os Levels (continued)

E(level) [†]	J ^π [‡]	XREF	Comments
860.4 ^g 6	(15/2 ⁻)	DE	
955.4 ^a 9	(21/2 ⁺)	A DE	
981.0 ^d 3	(17/2 ⁻)	A DE	
997.1 ⁱ 5	15/2 ^{-j}	DE	
1041.8 ^h 5	17/2 ^{-j}	A DE	
1078.3 ^f 6	(17/2 ⁻)	DE	
1194.4 ^e 4	(19/2 ⁻)	A DE	
1229.4 ^c 10	(17/2 ⁻)	D	
1316.0 ^g 6	(19/2 ⁻)	DE	
1318.0 ^b 9	(23/2 ⁺)	A DE	
1417.8 ^d 4	(21/2 ⁻)	A DE	
1427.7 ^a 9	(25/2 ⁺)	A DE	
1448.5 ⁱ 7	19/2 ^{-j}	DE	
1503.1 ^h 6	21/2 ^{-j}	A DE	
1566.7 ^f 6	(21/2 ⁻)	DE	
1654.5 ^e 4	(23/2 ⁻)	A DE	
1738.8 ^c 11	(21/2 ⁻)	D	
1824.7 ^{&} 10	(25/2)	E	J ^π : 397γ to (25/2 ⁺) 1428; band assignment.
1833.6 ^g 8	(23/2 ⁻)	DE	
1851.8 ^b 9	(27/2 ⁺)	A DE	
1899.6 ^d 4	(25/2 ⁻)	A DE	
1948.6 ⁱ 8	23/2 ^{-j}	DE	
1986.1 ^a 9	(29/2 ⁺)	A DE	
2011.2 ^h 7	25/2 ^{-j}	A DE	
2106.5 ^f 7	(25/2 ⁻)	DE	
2144.6 [@] 6	(25/2 ⁻)	E	J ^π : if band assignment is correct, the 327 keV cascade γ feeding from the (29/2 ⁻) band member would be expected to be E2. The DCO ratio of 1.3 3 for the 245γ deexciting to a (25/2 ⁻) level cannot differentiate between pure Q and pure D multipolarity; the level scheme requires D, ΔJ=0.
2160.0 ^e 4	(27/2 ⁻)	A DE	
2297.8 ^c 15	(25/2 ⁻)	D	
2332.1 ^{&} 10	(29/2)	E	
2377.0 ^g 9	(27/2 ⁻)	DE	
2418.2 ^d 5	(29/2 ⁻)	A DE	
2431.7 ^b 10	(31/2 ⁺)	A DE	
2471.5 [@] 5	(29/2 ⁻)	DE	J ^π : Q 572γ to (25/2 ⁻), 312γ to (27/2 ⁻) in ($^{34}\text{S}, 5n\gamma$).
2488.9 ⁱ 10	27/2 ^{-j}	DE	
2564.2 ^h 7	29/2 ^{-j}	A DE	
2604.9 ^a 10	(33/2 ⁺)	A DE	
2630.1 ^f 8	(29/2 ⁻)	DE	
2709.3 ^e 5	(31/2 ⁻)	A DE	
2818.6 ^g 11	(31/2 ⁻)	DE	
2873.0 [@] 6	(33/2 ⁻)	DE	
2894.2 ^c 18	(29/2 ⁻)	D	
2902.7 ^{&} 10	(33/2)	E	
2999.0 ^d 5	(33/2 ⁻)	A DE	
3046.6 ^b 10	(35/2 ⁺)	A DE	

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Adopted Levels, Gammas (continued) ^{179}Os Levels (continued)

E(level) [†]	J ^π [‡]	XREF	Comments
3053.6 ^f 9	(33/2 ⁻)	E	
3072.6 ⁱ 11	31/2 ^{-j}	DE	
3151.9 ^h 8	33/2 ^{-j}	A DE	
3260.2 ^a 10	(37/2 ⁺)	A DE	
3273.9 ^g 12	(35/2 ⁻)	DE	
3301.2 ^e 5	(35/2 ⁻)	A DE	
3379.9 [@] 8	(37/2 ⁻)	DE	
3482.7 ^{?&} 14	(37/2)	E	
3514.6 [?] 14	(37/2 ⁻)	E	
3519.2 ^c 21	(33/2 ⁻)	D	
3617.0 ^d 6	(37/2 ⁻)	A DE	
3691.6 ^{?i} 15	(35/2 ^{-j})	E	
3700.2 ^b 10	(39/2 ⁺)	A DE	
3784.6 ^h 9	(37/2 ^{-j})	DE	
3807.9 ^g 13	(39/2 ⁻)	DE	
3921.0 ^a 11	(41/2 ⁺)	A DE	
3932.3 ^e 6	(39/2 ⁻)	A DE	
3964.7 [@] 9	(41/2 ⁻)	DE	
4022.2 [#] 11	(41/2 ⁺)	DE	J ^π : Q 762γ to (37/2 ⁺) 3260; band assignment.
4212.2 ^c 23	(37/2 ⁻)	D	
4260.6 ^d 6	(41/2 ⁻)	DE	
4398.9 ^b 10	(43/2 ⁺)	A DE	
4420.3 ^g 14	(43/2 ⁻)	DE	
4464.4 ^h 11	(41/2 ^{-j})	DE	
4564.7 ^a 11	(45/2 ⁺)	A DE	
4593.0 ^e 7	(43/2 ⁻)	DE	
4609.6 [@] 11	(45/2 ⁻)	DE	
4720.6 [#] 11	(45/2 ⁺)	DE	
4930.3 ^d 8	(45/2 ⁻)	DE	
5099.3 ^g 15	(47/2 ⁻)	DE	
5146.7 ^b 12	(47/2 ⁺)	DE	
5177.4 ^h 15	(45/2 ^{-j})	DE	
5269.3 ^e 8	(47/2 ⁻)	DE	
5291.5 ^a 12	(49/2 ⁺)	DE	
5307.0 [@] 12	(49/2 ⁻)	DE	
5491.9 [#] 12	(49/2 ⁺)	DE	
5604.4 ^d 9	(49/2 ⁻)	DE	
5832.8 ^g 16	(51/2 ⁻)	DE	
5942.8 ^b 13	(51/2 ⁺)	DE	
5978.5 ^e 10	(51/2 ⁻)	DE	
6070.9 [@] 13	(53/2 ⁻)	DE	
6118.2 ^a 13	(53/2 ⁺)	DE	
6306.5 [#] 13	(53/2 ⁺)	DE	
6321.8 ^d 13	(53/2 ⁻)	DE	
6618.9 ^g 16	(55/2 ⁻)	DE	
6739.2 ^e 14	(55/2 ⁻)	DE	

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Adopted Levels, Gammas (continued)

^{179}Os Levels (continued)

E(level) [†]	J ^π [‡]	XREF	E(level) [†]	J ^π [‡]	XREF	E(level) [†]	J ^π [‡]	XREF
6783.9 ^b 14	(55/2 ⁺)	DE	7663.9 ^b 17	(59/2 ⁺)	D	9020.2? ^a 22	(65/2 ⁺)	D
6916.8 [@] 16	(57/2 ⁻)	DE	7842.8 [@] 19	(61/2 ⁻)	DE	9529.9? ^b 22	(67/2 ⁺)	D
7037.2 ^a 14	(57/2 ⁺)	DE	8016.2 ^a 20	(61/2 ⁺)	D	9866.2? [@] 24	(69/2 ⁻)	D
7090.0 ^d 17	(57/2 ⁻)	D	8019.5 [#] 17	(61/2 ⁺)	D	10042.2? ^a 24	(69/2 ⁺)	D
7157.5 [#] 14	(57/2 ⁺)	DE	8406.7 ^e 20	(63/2 ⁻)	D	11020? [@] 3	(73/2 ⁻)	D
7471.3 ^g 19	(59/2 ⁻)	D	8552.9 ^b 20	(63/2 ⁺)	D			
7553.7 ^e 17	(59/2 ⁻)	D	8837.8 [@] 22	(65/2 ⁻)	D			

[†] Calculated by evaluator from a least-squares fit to E_γ, assigning ΔE=1 keV to adopted E_γ values which have no stated uncertainty.

[‡] Assignments given without further comment are based on deduced rotational structure, taking into account γ-ray multiplicities and γ decay patterns, except as noted.

Band(A): π=+, α=+1/2 band.

@ Band(B): 3-quasiparticle band, α=+1/2. Possible configuration=((π 5/2[512])(ν i_{13/2}²)). J^π is from (³⁰Si,5nγ), except for the 2144 level; this level is absent in that reaction but is fed by a mult=Q 327γ from the band member immediately above it in (³⁴S,5nγ). Note that J^π values for all band members shown here are one unit higher than deduced in (³⁴S,5nγ). This arises from differing mult assignments in the two reactions. See comment on mult for 572γ and 455.0γ.

& Band(C): Collective band, α=+1/2. From (³⁴S,5nγ); J uncertain by 1 unit. Absent in (³⁰Si,5nγ).

^a Band(D): 9/2[624] band, α=+1/2. Coriolis–mixed band; configuration assignment based on energy systematics of this band in ¹⁷⁷Os, ¹⁸¹Os, and ¹⁸³Os (1983Dr05). First band crossing at ħω=0.31 MeV with alignment gain 6.5ħ; second band crossing at ħω≈0.5 MeV with alignment gain of >3ħ, attributed to 1/2[541] (π h_{9/2}) quasiproton pair alignment (1992Bu14). 1994Ba27 suggest the presence of hexadecapole deformation since this favored sequence is crossed by 3-quasiparticle structure at a higher rotational frequency than is the unfavored α=-1/2 sequence; additionally, triaxial shape (γ≤-10°) is suggested by the signature dependence of intraband B(M1)/B(E2) values (1994Ba27).

^b Band(d): 9/2[624] band, α=-1/2. From (³⁰Si,5nγ); upper two levels from (³⁴S,5nγ) not adopted. First band crossing at ħω=0.30 MeV with alignment gain of 5.5ħ. Second band crossing at ħω=0.44 MeV with alignment gain of ≈2.5ħ attributed to 1/2[541] (π h_{9/2}) quasiproton pair alignment (1992Bu14). See also the comment on this band's signature partner.

^c Band(E): 5/2[523]? band, α=+1/2. Probably mixed with 1/2[521] band. Authors note that cranked shell–model calculations predict the 5/2[523] bandhead at considerably higher energy than observed for this band, but all other likely orbitals have already been assigned to other states in ¹⁷⁹Os (1992Bu14). Band crossing at ħω=0.26 MeV, alignment gain ≈4.5ħ.

^d Band(F): 7/2[514] band, α=+1/2. Analogous to 7/2[514] band in ¹⁸¹Os. Intraband transition B(M1)/B(E2) ratios suggest Coriolis mixing with 5/2[512] band (1992Bu14). Band crossing at ħω=0.28 MeV with alignment gain ≈11ħ due to alignment of i_{13/2} neutron pair.

^e Band(f): 7/2[514] band, α=-1/2. Band crossing at ħω=0.27 MeV with alignment gain ≈11ħ due to alignment of i_{13/2} neutron pair. See also the comment on this band's signature partner.

^f Band(G): 5/2[512] band, α=+1/2. Weakly populated band in (³⁴S,5nγ), as is the case in isotones ¹⁷⁷W and ¹⁸¹Pt. Orbital assignment supported by deduced intraband transition B(M1)/B(E2) ratios and g_K factors (1993Ba45). Band crossing at ħω=0.22 MeV with alignment gain ≈8.5ħ due to alignment of i_{13/2} neutron pair; second band crossing at ħω=0.5 MeV with alignment gain of >2ħ attributed to 1/2[541] (π h_{9/2}) quasiproton pair alignment (1992Bu14).

^g Band(g): 5/2[512] band, α=-1/2. Band crossing at ħω=0.23 MeV with alignment gain ≈8.5ħ due to alignment of i_{13/2} neutron pair. Assignment supported by intraband transition B(M1)/B(E2) values.

^h Band(H): 1/2[521] band, α=+1/2. Band parameters: A=15.9, B=-32, B_{2K}=-32, a=+0.82 (J=1/2, 3/2, 5/2, 7/2, 9/2 members). Nilsson orbital assignment based on decoupling parameter and supported by energy systematics of this orbital in ¹⁷⁷Os and ¹⁸¹Os. Band crossing at ħω=0.23 MeV with alignment gain >4.5ħ due to alignment of i_{13/2} neutron pair.

ⁱ Band(h): 1/2[521] band, α=-1/2. Band crossing at ħω=0.26 MeV with alignment gain >8.5ħ due to alignment of i_{13/2} neutron pair. See also the comment on this band's signature partner.

^j Definite J^π assigned to J≤33/2 members of g.s. band based on established J^π=1/2⁻ for g.s. and mult(86γ)=M1+E2 for J=3/2 to 1/2 transition, in addition to smooth progression of intraband transition energies.

Adopted Levels, Gammas (continued)

$\gamma(^{179}\text{Os})$

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult.#	δ	α^c	Comments
86.31	3/2 ⁻	86.3 1	100	0.0	1/2 ⁻	M1+E2	-5.3 7	8.04	E_γ : from ε decay. Mult., δ : D+Q from $\gamma(\theta)$ in (¹⁶ O,4n γ) for intraband transition with $\delta=-5.3$ 7 or +0.29 4; E2(+M1) from subshell ratios in ε decay with $\delta>2.7$.
100.21	5/2 ⁻	(13.9)		86.31	3/2 ⁻				$I_{(\gamma+ce)}$: 1100 220 from intensity balance at 100 and 86 levels in ¹⁷⁹ Ir ε decay.
		100.2 1	100 5	0.0	1/2 ⁻	(E2)		4.32	E_γ ,Mult.: from K:L2 in ε decay.
145.41	(7/2) ⁻	45.2 1	100	100.21	5/2 ⁻	M1&		9.97	B(M1)(W.u.)= 4.35×10^{-5} 13 E_γ : from ε decay. Mult.: from subshell ratios in ε decay and from $\alpha(\text{exp})$ in (¹⁶ O,4n γ).
195.9	(5/2) ⁻	109.6	100	86.31	3/2 ⁻				
210.8	(7/2) ⁻	95.4 5	100	115.4	(5/2) ⁻	M1		6.44 14	Mult.: from $\alpha(\text{K})\text{exp}$ in ε decay.
243.0	(9/2) ⁺	97.5 1	100	145.41	(7/2) ⁻	E1&		0.417	B(E1)(W.u.)= 2.07×10^{-7} 4 E_γ : from ε decay.
273.10	(9/2) ⁻	127.7 1	100	145.41	(7/2) ⁻	(M1+E2)		2.2 6	E_γ : from ε decay. Mult.: D+Q from $\gamma(\theta)$ in (¹⁶ O,4n γ) for intraband γ .
286.6	(11/2) ⁺	(43.6 12)	100.0	243.0	(9/2) ⁺				E_γ : from level energy difference.
296.4	7/2 ⁻	196.3 5	18.1 23	100.21	5/2 ⁻				
		210.1 5	100	86.31	3/2 ⁻	(E2)		0.281 5	
320.20	9/2 ⁻	23.8 4	0.13 3	296.4	7/2 ⁻				E_γ : from level energy difference. I_γ : from (³⁴ S,5n γ) $\gamma\gamma$ coin. E_γ : from ε decay.
		220.0 2	100	100.21	5/2 ⁻	(E2)		0.242	
336.6	(9/2) ⁻	125.8 5	100	210.8	(7/2) ⁻				
		221.1 5	53 10	115.4	(5/2) ⁻				
345.0	(13/2) ⁺	58.40 15	100	286.6	(11/2) ⁺				E_γ : from (¹⁶ O,4n γ).
		102.1 3	19.0 ^b 19	243.0	(9/2) ⁺				
424.50	(11/2) ⁻	151.3 3	29.8 ^b 13	273.10	(9/2) ⁻	(M1+E2)		1.3 5	Mult.: D+Q from $\gamma(\theta)$ in (¹⁶ O,4n γ) for intraband γ .
		279.1 3	100	145.41	(7/2) ⁻	(E2)		0.1136	Mult.: Q from $\gamma(\theta)$ in (¹⁶ O,4n γ) for intraband γ .
436.5	(9/2) ⁻	240.6	100	195.9	(5/2) ⁻	(E2)		0.181	
487.3	(11/2) ⁻	150.6 5	71 9	336.6	(9/2) ⁻	(M1+E2)		1.3 5	Mult.: D+Q from (³⁴ S,5n γ) for intraband γ .
		276.5 5	100	210.8	(7/2) ⁻	(E2)		0.1169 18	
500.1	(15/2) ⁺	154.9 3	95 ^b 4	345.0	(13/2) ⁺	(M1+E2)	-0.9 3	1.26 15	Mult., δ : from $\gamma(\theta)$ in (¹⁶ O,4n γ) for intraband γ .
		213.5 3	100	286.6	(11/2) ⁺	(E2)		0.267	
589.6	(17/2) ⁺	89.40 15	19.5 ^b 18	500.1	(15/2) ⁺				E_γ : from (¹⁶ O,4n γ). I_γ : average excludes 11.1 12 in (³⁴ S,5n γ) $\gamma\gamma$ coin. Weighted average of all data is 13.6 26.
		244.59 9	100	345.0	(13/2) ⁺	(E2)		0.1715	E_γ : weighted average from (³⁴ S,5n γ) and (¹⁶ O,4n γ). Mult.: Q from $\gamma(\theta)$ in (¹⁶ O,4n γ) for intraband γ .

Adopted Levels, Gammas (continued)

$\gamma(^{179}\text{Os})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult.#	δ	α^c	Comments
594.2	(13/2 ⁻)	169.6 3 321.2 ^e 3	13.8 ^b 8 100 ^e	424.50 (11/2 ⁻) 273.10 (9/2 ⁻)	(M1+E2) (E2)			0.9 4 0.0747	Mult.: D+Q from $\gamma(\theta)$ in (¹⁶ O,4n γ) for intraband γ .
607.4	11/2 ⁻	287.1 5 311.0 5	16 3 100	320.20 9/2 ⁻ 296.4 7/2 ⁻	(E2)			0.0821	
641.4	13/2 ⁻	34.0 321.2 ^e 3	0.25 19 100 ^e	607.4 11/2 ⁻ 320.20 9/2 ⁻	(E2)			0.0747	I_γ : from (³⁴ S,5n γ) $\gamma\gamma$ coin.
662.9	(13/2 ⁻)	175.6 5 238.5 326.4 5	32 4 14 6 100	487.3 (11/2 ⁻) 424.50 (11/2 ⁻) 336.6 (9/2 ⁻)	(M1+E2) (E2) (E2)	-0.32 18	1.08 7	0.0713	Mult.: D+Q in (³⁴ S,5n γ) for intraband γ . I_γ : γ seen in (³⁰ Si,5n γ) only.
781.4	(15/2 ⁻)	187.2 3 356.9 3	14.7 ^b 10 100	594.2 (13/2 ⁻) 424.50 (11/2 ⁻)	(M1+E2) (E2)			0.7 3 0.0553	Mult.: D+Q in (³⁴ S,5n γ) for intraband γ .
788.2	(13/2 ⁻)	351.7	100	436.5 (9/2 ⁻)	(E2)			0.0576	
856.1	(19/2 ⁺)	266.5 [@] 3 355.99 9	32.0 ^b 15 100	589.6 (17/2 ⁺) 500.1 (15/2 ⁺)	(M1+E2) (E2)			0.24 12 0.0557	Mult.: D+Q in (³⁴ S,5n γ) for intraband γ . E_γ : weighted average from (³⁴ S,5n γ) and (¹⁶ O,4n γ).
860.4	(15/2 ⁻)	197.5 5 373.2 5 435.9 ^f	24 3 100	662.9 (13/2 ⁻) 487.3 (11/2 ⁻) 424.50 (11/2 ⁻)	(M1) (E2)			0.817 13 0.0489	
955.4	(21/2 ⁺)	99.40 15 365.80 9	3.29 ^b 15 100	856.1 (19/2 ⁺) 589.6 (17/2 ⁺)	(E2)			0.0516	E_γ : from (¹⁶ O,4n γ). E_γ : weighted average from (³⁴ S,5n γ) and (¹⁶ O,4n γ). Mult.: Q from $\gamma(\theta)$ in (¹⁶ O,4n γ) for intraband γ .
981.0	(17/2 ⁻)	199.7 3	19.2 ^b 16	781.4 (15/2 ⁻)	(M1+E2)			0.56 23	Mult.: D+Q in (³⁴ S,5n γ) for intraband γ . I_γ : from (³⁴ S,5n γ) singles and $\gamma\gamma$ coin. Other branching: 20 2 from (³⁰ Si,5n γ), 17 3 from (¹⁶ O,4n γ).
997.1	15/2 ⁻	318.0 386.79 9 208.8 ^f	7.3 20 100	662.9 (13/2 ⁻) 594.2 (13/2 ⁻) 788.2 (13/2 ⁻)	(E2)			0.0443	E_γ : from (¹⁶ O,4n γ).
1041.8	17/2 ⁻	355.7 5 389.7 5 400.4 3	27 11 100	641.4 13/2 ⁻ 607.4 11/2 ⁻	(E2)			0.0434	E_γ, I_γ : γ seen in (³⁴ S,5n γ) only.
1078.3	(17/2 ⁻)	415.4 5 217.9 5	100	641.4 13/2 ⁻ 860.4 (15/2 ⁻)	(E2)			0.0404	
1194.4	(19/2 ⁻)	415.4 5 213.4 3 413.0 3	100	662.9 (13/2 ⁻) 981.0 (17/2 ⁻) 781.4 (15/2 ⁻)	(E2) (M1+E2) (E2)			0.0366 0.46 20 0.0371	Mult.: D+Q in (³⁴ S,5n γ) for intraband γ .
1229.4	(17/2 ⁻)	441.2	100	788.2 (13/2 ⁻)	(E2)			0.0312	
1316.0	(19/2 ⁻)	237.6 5 455.6 5	12 4 100	1078.3 (17/2 ⁻) 860.4 (15/2 ⁻)					I_γ : from (³⁴ Si,5n γ) singles and $\gamma\gamma$ coin.
1318.0	(23/2 ⁺)	362.7 3 461.9 3	19.5 ^b 17 100	955.4 (21/2 ⁺) 856.1 (19/2 ⁺)	(M1+E2) (E2)			0.10 6 0.0278	Mult.: D+Q in (³⁴ S,5n γ) for intraband γ .

Adopted Levels, Gammas (continued)

$\gamma(^{179}\text{Os})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult.#	α^c	Comments
1417.8	(21/2 ⁻)	223.4 3 339.7	11.6 ^b 6 3.3 12	1194.4 (19/2 ⁻) 1078.3 (17/2 ⁻)		(M1+E2)	0.40 18	Mult.: D in (³⁰ Si,5n γ) and (D+Q) in (³⁴ S,5n γ) for intraband γ . I γ : from (³⁰ Si,5n γ).
1427.7	(25/2 ⁺)	436.8 3 109.7 [@] 3 472.28 9	100 2.9 5 100	981.0 (17/2 ⁻) 1318.0 (23/2 ⁺) 955.4 (21/2 ⁺)		(E2)	0.0321 0.0263	Mult.: Q from $\gamma(\theta)$ in (¹⁶ O,4n γ) for intraband γ . I γ : 3.6 4 in (³⁰ Si,5n γ), 2.2 4 and in (³⁴ S,5n γ) $\gamma\gamma$ coin. E γ : weighted average from (³⁴ S,5n γ) and (¹⁶ O,4n γ). Mult.: Q from $\gamma(\theta)$ in (¹⁶ O,4n γ) for intraband γ .
1448.5	19/2 ⁻	219.0 451.4 5	16 3 100 14	1229.4 (17/2 ⁻) 997.1 15/2 ⁻		(E2)	0.0295	I γ : from (³⁰ Si,5n γ). I γ : from (³⁰ Si,5n γ).
1503.1	21/2 ⁻	461.3 3	100	1041.8 17/2 ⁻		(E2)	0.0279	
1566.7	(21/2 ⁻)	250.8 5 488.3 5	10 3 100	1316.0 (19/2 ⁻) 1078.3 (17/2 ⁻)		(E2)	0.0242	I γ : from (³⁴ S,5n γ) singles and $\gamma\gamma$ coin.
1654.5	(23/2 ⁻)	236.8 3 460.1 3 509.5	11.7 14 100 100	1417.8 (21/2 ⁻) 1194.4 (19/2 ⁻) 1229.4 (17/2 ⁻)		(M1+E2)	0.34 16 0.0281 0.0218	I γ : weighted average of 11.6 15 and 13 4 in (³⁴ S,5n γ). Other branching: 20.7 22 in (³⁰ Si,5n γ). Mult.: (D+Q) in (³⁴ S,5n γ), D in (³⁰ Si,5n γ) for intraband γ .
1738.8	(21/2 ⁻)	397.1 5	100	1427.7 (25/2 ⁺)		(E2)	0.0218	
1824.7	(25/2)	266.8	27 5	1566.7 (21/2 ⁻)		(M1)	0.356	I γ : from (³⁰ Si,5n γ).
1833.6	(23/2 ⁻)	517.6 5	100 9	1316.0 (19/2 ⁻)		(E2)	0.0209	I γ : from (³⁰ Si,5n γ).
1851.8	(27/2 ⁺)	424.1 3 533.7 3 245.2 3 332.7 ^d	14.9 16 100 12.5 8 2.6 ^d 14	1427.7 (25/2 ⁺) 1318.0 (23/2 ⁺) 1654.5 (23/2 ⁻) 1566.7 (21/2 ⁻)		(M1+E2)	0.07 4 0.0194 0.31 14	I γ : weighted average from (¹⁶ O,4n γ) and (³⁴ S,5n γ) singles and $\gamma\gamma$ coin. Other branching: 24.3 23 from (³⁰ Si,5n γ). Mult.: D+Q in (³⁴ S,5n γ) for intraband γ .
1899.6	(25/2 ⁻)	481.7 3 209.9	100	1417.8 (21/2 ⁻) 1738.8 (21/2 ⁻)		(E2)	0.0250	Mult.: (D+Q) in (³⁴ S,5n γ), D in (³⁰ Si,5n γ) for intraband γ . I γ : from (³⁰ Si,5n γ). A 333 γ is placed from 1900 level in (³⁰ Si,5n γ), but from 4593 level in (³⁴ S,5n γ).
1948.6	23/2 ⁻	500.1 5	100 14	1448.5 19/2 ⁻		(E2)	0.0228	Mult.: Q from $\gamma(\theta)$ in (¹⁶ O,4n γ) for intraband γ .
1986.1	(29/2 ⁺)	558.45 15	100	1427.7 (25/2 ⁺)		(E2)	0.01745	E γ : weighted average from (³⁴ S,5n γ) and (¹⁶ O,4n γ).
2011.2	25/2 ⁻	508.1 3	100	1503.1 21/2 ⁻		(E2)	0.0219	
2106.5	(25/2 ⁻)	539.8 5	100	1566.7 (21/2 ⁻)		(E2)	0.0189	
2144.6	(25/2 ⁻)	245.0 5	100	1899.6 (25/2 ⁻)				
2160.0	(27/2 ⁻)	260.6 [@] 3	9.3 13	1899.6 (25/2 ⁻)		(M1+E2)	0.26 12	I γ : weighted average from (³⁰ Si,5n γ) and (³⁴ S,5n γ) singles data. Mult.: (D+Q) in (³⁴ S,5n γ), D in (³⁰ Si,5n γ) for intraband γ .
2297.8	(25/2 ⁻)	505.5 3 559.0	100 100	1654.5 (23/2 ⁻) 1738.8 (21/2 ⁻)		(E2)	0.0222	

Adopted Levels, Gammas (continued)

$\gamma(^{179}\text{Os})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult. #	α^c	Comments
2332.1	(29/2)	346.0 5	100 20	1986.1	(29/2 ⁺)			I_γ : from (³⁴ S,5n γ).
		507.4 5	60 20	1824.7	(25/2)			I_γ : from (³⁴ S,5n γ).
2377.0	(27/2 ⁻)	543.4 5	100	1833.6	(23/2 ⁻)	(E2)	0.0186	
2418.2	(29/2 ⁻)	258.4 5	8.2 16	2160.0	(27/2 ⁻)	(M1+E2)	0.27 13	Mult.: (D+Q) in (³⁴ S,5n γ), D in (³⁰ Si,5n γ) for intraband γ .
		518.5 3	100	1899.6	(25/2 ⁻)	(E2)	0.0208	
2431.7	(31/2 ⁺)	445.6 5	18 3	1986.1	(29/2 ⁺)	(M1+E2)	0.06 3	I_γ : weighted average of 29 6 from (²⁸ Si,5n γ) and 20 4 and 15 3 from (³⁴ S,5n γ) singles and $\gamma\gamma$ coin.
								Mult.: D+Q in (³⁴ S,5n γ) for intraband γ .
		579.8 3	100	1851.8	(27/2 ⁺)	(E2)	0.01597	
2471.5	(29/2 ⁻)	311.7 5	29 15	2160.0	(27/2 ⁻)			I_γ : γ seen in (³⁴ S,5n γ) only.
		326.9 5	29 15	2144.6	(25/2 ⁻)			I_γ : γ seen in (³⁴ S,5n γ) only.
		364.7	10 4	2106.5	(25/2 ⁻)			I_γ : γ seen in (³⁰ Si,5n γ) only.
		571.8 5	100	1899.6	(25/2 ⁻)	Q ^a		
2488.9	27/2 ⁻	540.3 5	100	1948.6	23/2 ⁻	(E2)	0.0189	
2564.2	29/2 ⁻	553.0 3	100	2011.2	25/2 ⁻	(E2)	0.0179	
2604.9	(33/2 ⁺)	618.8 3	100	1986.1	(29/2 ⁺)	(E2)	0.01375	
2630.1	(29/2 ⁻)	523.7 5	100	2106.5	(25/2 ⁻)	(E2)	0.0203	E_γ : 523.0 in (³⁰ Si,5n γ).
2709.3	(31/2 ⁻)	291.3 5	11.0 15	2418.2	(29/2 ⁻)	(M1+E2)	0.19 9	Mult.: (D+Q) in (³⁴ S,5n γ) for intraband γ .
		549.3 3	100	2160.0	(27/2 ⁻)	(E2)	0.0181	
2818.6	(31/2 ⁻)	441.6 5	100	2377.0	(27/2 ⁻)	(E2)	0.0312	
2873.0	(33/2 ⁻)	243.3	13 5	2630.1	(29/2 ⁻)			I_γ : from (³⁰ Si,5n γ).
		401.4 5	72 13	2471.5	(29/2 ⁻)	(E2)	0.0401	I_γ : weighted average from (³⁰ Si,5n γ) and (³⁴ S,5n γ) singles data.
		454.8 5	100	2418.2	(29/2 ⁻)	Q ^a		
2894.2	(29/2 ⁻)	596.4	100	2297.8	(25/2 ⁻)	(E2)	0.01496	
2902.7	(33/2)	297.6 5	100 20	2604.9	(33/2 ⁺)			
		570.8 5	60 20	2332.1	(29/2)			
2999.0	(33/2 ⁻)	289.9 5	10.8 21	2709.3	(31/2 ⁻)			E_γ : 289.3 in (³⁰ Si,5n γ).
								Mult.: (D+Q) in (³⁴ S,5n γ) for intraband γ .
		580.8 3	100	2418.2	(29/2 ⁻)	(E2)	0.01591	
3046.6	(35/2 ⁺)	441.8 5	19 3	2604.9	(33/2 ⁺)	(M1+E2)	0.06 3	I_γ : weighted average from (³⁴ S,5n γ) singles and $\gamma\gamma$ coin data.
								Mult.: (D+Q) in (³⁴ S,5n γ), D in (³⁰ Si,5n γ) for intraband γ .
		614.9 3	100	2431.7	(31/2 ⁺)	(E2)	0.01395	
3053.6	(33/2 ⁻)	423.5 5	100	2630.1	(29/2 ⁻)			
3072.6	31/2 ⁻	583.7 5	100	2488.9	27/2 ⁻	(E2)	0.01573	
3151.9	33/2 ⁻	587.7 3	100	2564.2	29/2 ⁻	(E2)	0.01548	
3260.2	(37/2 ⁺)	655.2 3	100	2604.9	(33/2 ⁺)	(E2)	0.01208	Mult.: Q from $\gamma(\theta)$ in (¹⁶ O,4n γ) for intraband γ .
3273.9	(35/2 ⁻)	455.4 5	100	2818.6	(31/2 ⁻)			
3301.2	(35/2 ⁻)	302.1 5	7.6 15	2999.0	(33/2 ⁻)	(M1+E2)	0.17 9	Mult.: (D+Q) in (³⁴ S,5n γ) for intraband γ .
		591.8 3	100	2709.3	(31/2 ⁻)	(E2)	0.01523	

Adopted Levels, Gammas (continued)

$\gamma(^{179}\text{Os})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult.#	α^c	Comments
3379.9	(37/2 ⁻)	506.9 5	100	2873.0	(33/2 ⁻)	(E2)	0.0220	
3482.7?	(37/2)	580 ^f	100	2902.7	(33/2)			
3514.6?	(37/2 ⁻)	461 ^f	100	3053.6	(33/2 ⁻)			
3519.2	(33/2 ⁻)	625	100	2894.2	(29/2 ⁻)	(E2)	0.01344	
3617.0	(37/2 ⁻)	316.0 5	12 4	3301.2	(35/2 ⁻)			I_γ : weighted average from (³⁴ S,5n γ) singles and $\gamma\gamma$ coin data.
		618.0 3	100	2999.0	(33/2 ⁻)	[E2]	0.01379	
3691.6?	(35/2 ⁻)	619 ^f	100	3072.6	31/2 ⁻			
3700.2	(39/2 ⁺)	440.0 5	18 6	3260.2	(37/2 ⁺)	(M1+E2)	0.06 3	I_γ : weighted average from (³⁴ S,5n γ) singles and $\gamma\gamma$ coin data. Mult.: (D+Q) in (³⁴ S,5n γ), D in (³⁰ Si,5n γ) for intraband γ . Mult.: (Q) from $\gamma(\theta)$ in (¹⁶ O,4n γ) for intraband γ .
		653.6 3	100	3046.6	(35/2 ⁺)	(E2)	0.01215	
3784.6	(37/2 ⁻)	632.7 5	100	3151.9	33/2 ⁻			
3807.9	(39/2 ⁻)	534.0 5	100	3273.9	(35/2 ⁻)	(E2)	0.0194	
3921.0	(41/2 ⁺)	660.7 4	100	3260.2	(37/2 ⁺)	(E2)	0.01186	E_γ : weighted average of 660.5 3 from (¹⁶ O,4n γ) and 661.3 5 from (³⁴ S,5n γ).
3932.3	(39/2 ⁻)	316	10 5	3617.0	(37/2 ⁻)	(M1+E2)	0.15 8	I_γ : weighted average from (³⁴ S,5n γ) singles and $\gamma\gamma$ coin data. Mult.: (D+Q) in (³⁴ S,5n γ) for intraband γ .
		631.1 3	100	3301.2	(35/2 ⁻)	(E2)	0.01314	E_γ : weighted average of 630.9 3 from (¹⁶ O,4n γ) and 631.5 5 from (³⁴ S,5n γ).
3964.7	(41/2 ⁻)	584.8 5	100	3379.9	(37/2 ⁻)	(E2)	0.01566	
4022.2	(41/2 ⁺)	762.2 5	100	3260.2	(37/2 ⁺)	Q		
4212.2	(37/2 ⁻)	693.0	100	3519.2	(33/2 ⁻)	(E2)	0.01067	
4260.6	(41/2 ⁻)	328.2 5	19 7	3932.3	(39/2 ⁻)			I_γ : weighted average from (³⁴ S,5n γ) singles and $\gamma\gamma$ coin data. Other branching: 64 21 from (³⁰ Si,5n γ).
		643.6 5	100	3617.0	(37/2 ⁻)	(E2)	0.01258	
4398.9	(43/2 ⁺)	698.7 3	100	3700.2	(39/2 ⁺)	(E2)	0.01048	
4420.3	(43/2 ⁻)	612.4 5	100	3807.9	(39/2 ⁻)	(E2)	0.01408	
4464.4	(41/2 ⁻)	679.8 5	100	3784.6	(37/2 ⁻)	(E2)	0.01113	
4564.7	(45/2 ⁺)	643.5 3	100	3921.0	(41/2 ⁺)	(E2)	0.01258	
4593.0	(43/2 ⁻)	332.7 ^d 5	<20 ^d	4260.6	(41/2 ⁻)			333 γ placed from 1900 level in (³⁰ Si,5n γ), but from 4593 level in (³⁴ S,5n γ). I_γ : weighted average from (³⁴ S,5n γ) singles and $\gamma\gamma$ coin data is 15 5.
		660.5 5	100	3932.3	(39/2 ⁻)	(E2)	0.01187	
4609.6	(45/2 ⁻)	644.9 5	100	3964.7	(41/2 ⁻)	(E2)	0.01252	
4720.6	(45/2 ⁺)	698.6 5	100 13	4022.2	(41/2 ⁺)			Other E_γ : 699.4 in (³⁰ Si,5n γ).
		799.4 5	56 9	3921.0	(41/2 ⁺)	Q		Other E_γ : 800.2 in (³⁰ Si,5n γ).
4930.3	(45/2 ⁻)	337.4	14 4	4593.0	(43/2 ⁻)			
		669.6 5	100 14	4260.6	(41/2 ⁻)	(E2)	0.01151	
5099.3	(47/2 ⁻)	679.0 5	100	4420.3	(43/2 ⁻)	(E2)	0.01116	
5146.7	(47/2 ⁺)	747.8 5	100	4398.9	(43/2 ⁺)	(E2)	0.00904 13	Other E_γ : 748.5 in (³⁰ Si,5n γ).

Adopted Levels, Gammas (continued)

$\gamma(^{179}\text{Os})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π	Mult.#	α^c	Comments
5177.4	(45/2 ⁻)	713.0	100	4464.4	(41/2 ⁻)	(E2)	0.01003	
5269.3	(47/2 ⁻)	676.5	5 100	4593.0	(43/2 ⁻)	(E2)	0.01125	
5291.5	(49/2 ⁺)	726.8	5 100	4564.7	(45/2 ⁺)	(E2)	0.00962	14
5307.0	(49/2 ⁻)	697.4	5 100	4609.6	(45/2 ⁻)	(E2)	0.01052	
5491.9	(49/2 ⁺)	771.3	5 100	4720.6	(45/2 ⁺)	(E2)	0.00847	12
5604.4	(49/2 ⁻)	335.7	27 9	5269.3	(47/2 ⁻)			
		674.0	5 100 26	4930.3	(45/2 ⁻)			
5832.8	(51/2 ⁻)	733.4	5 100	5099.3	(47/2 ⁻)	(E2)	0.00943	14
5942.8	(51/2 ⁺)	796.1	5 100	5146.7	(47/2 ⁺)	(E2)	0.00792	12
5978.5	(51/2 ⁻)	709.1	5 100	5269.3	(47/2 ⁻)	(E2)	0.01015	Other E_γ : 797.6 in ($^{30}\text{Si},5n\gamma$).
6070.9	(53/2 ⁻)	763.9	5 100	5307.0	(49/2 ⁻)	(E2)	0.00864	13
6118.2	(53/2 ⁺)	826.7	5 100	5291.5	(49/2 ⁺)	(E2)	0.00732	11
6306.5	(53/2 ⁺)	814.6	5 100	5491.9	(49/2 ⁺)	(E2)	0.00754	11
6321.8	(53/2 ⁻)	717.4	100	5604.4	(49/2 ⁻)	(E2)	0.00989	14
6618.9	(55/2 ⁻)	786.1	5 100	5832.8	(51/2 ⁻)	(E2)	0.00813	12
6739.2	(55/2 ⁻)	760.8	100	5978.5	(51/2 ⁻)	(E2)	0.00872	13
6783.9	(55/2 ⁺)	841.1	5 100	5942.8	(51/2 ⁺)	(E2)	0.00706	10
6916.8	(57/2 ⁻)	845.9	100	6070.9	(53/2 ⁻)	(E2)	0.00697	10
7037.2	(57/2 ⁺)	920.0	100	6118.2	(53/2 ⁺)	(E2)	0.00587	9
7090.0	(57/2 ⁻)	768.2	100	6321.8	(53/2 ⁻)			E_γ : from ($^{30}\text{Si},5n\gamma$); 850 in ($^{34}\text{S},5n\gamma$).
7157.5	(57/2 ⁺)	851.0	5 100	6306.5	(53/2 ⁺)	(E2)	0.00689	10
7471.3	(59/2 ⁻)	852.4	100	6618.9	(55/2 ⁻)	(E2)	0.00687	10
7553.7	(59/2 ⁻)	814.5	100	6739.2	(55/2 ⁻)	(E2)	0.00785	
7663.9	(59/2 ⁺)	880.0	100	6783.9	(55/2 ⁺)	(E2)	0.00643	9
7842.8	(61/2 ⁻)	926.0	100	6916.8	(57/2 ⁻)	(E2)	0.00580	9
8016.2	(61/2 ⁺)	978.0	100	7037.2	(57/2 ⁺)	(E2)	0.00519	8
8019.5	(61/2 ⁺)	862.0	100	7157.5	(57/2 ⁺)	(E2)	0.00671	10
8406.7	(63/2 ⁻)	853.0	100	7553.7	(59/2 ⁻)	(E2)	0.00686	10
8552.9	(63/2 ⁺)	889.0	100	7663.9	(59/2 ⁺)	(E2)	0.00630	9
8837.8	(65/2 ⁻)	995.0	100	7842.8	(61/2 ⁻)			
9020.2?	(65/2 ⁺)	1004 ^f	100	8016.2	(61/2 ⁺)			
9529.9?	(67/2 ⁺)	977 ^f	100	8552.9	(63/2 ⁺)			
9866.2?	(69/2 ⁻)	1028.4 ^f	100	8837.8	(65/2 ⁻)			
10042.2?	(69/2 ⁺)	1022 ^f	100	9020.2?	(65/2 ⁺)			
11020?	(73/2 ⁻)	1154.1 ^f	100	9866.2?	(69/2 ⁻)			

[†] Unless noted to the contrary, E_γ is taken from ($^{16}\text{O},4n\gamma$) if uncertainty is 0.3 keV, from ($^{34}\text{S},5n\gamma$) if uncertainty is 0.5 keV and from ($^{30}\text{Si},5n\gamma$) if uncertainty is unstated.

Adopted Levels, Gammas (continued)

$\gamma(^{179}\text{Os})$ (continued)

- ‡ Weighted average from ($^{30}\text{Si},5n\gamma$) and ($^{34}\text{S},5n\gamma$) (singles and coincidence data), except as noted.
- # From directional correlation ratios in ($^{30}\text{Si},5n\gamma$), except as noted, with intraband transitions assigned $\Delta\pi=(\text{no})$.
- @ Assignment uncertain.
- & From $\alpha(\text{exp})$ deduced from intensity balance in ($^{16}\text{O},4n\gamma$).
- ^a From ($^{30}\text{Si},5n\gamma$); DCO ratio (0.8 2) in ($^{34}\text{S},5n\gamma$) overlaps value expected for Q transition, but authors assign $\Delta J=1$ (mixed) or $\Delta J=0$. In ($^{30}\text{Si},5n\gamma$), the DCO ratios are 1.03 9 and 0.97 10 for the 455 γ and 572 γ , respectively, and the authors assign mult=Q to both transitions, as adopted here.
- ^b Weighted average from ($^{30}\text{Si},5n\gamma$), ($^{34}\text{S},5n\gamma$) (singles and coincidence data) and ($^{16}\text{O},4n\gamma$).
- ^c 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.
- ^d Multiply placed with undivided intensity.
- ^e Multiply placed with intensity suitably divided.
- ^f Placement of transition in the level scheme is uncertain.

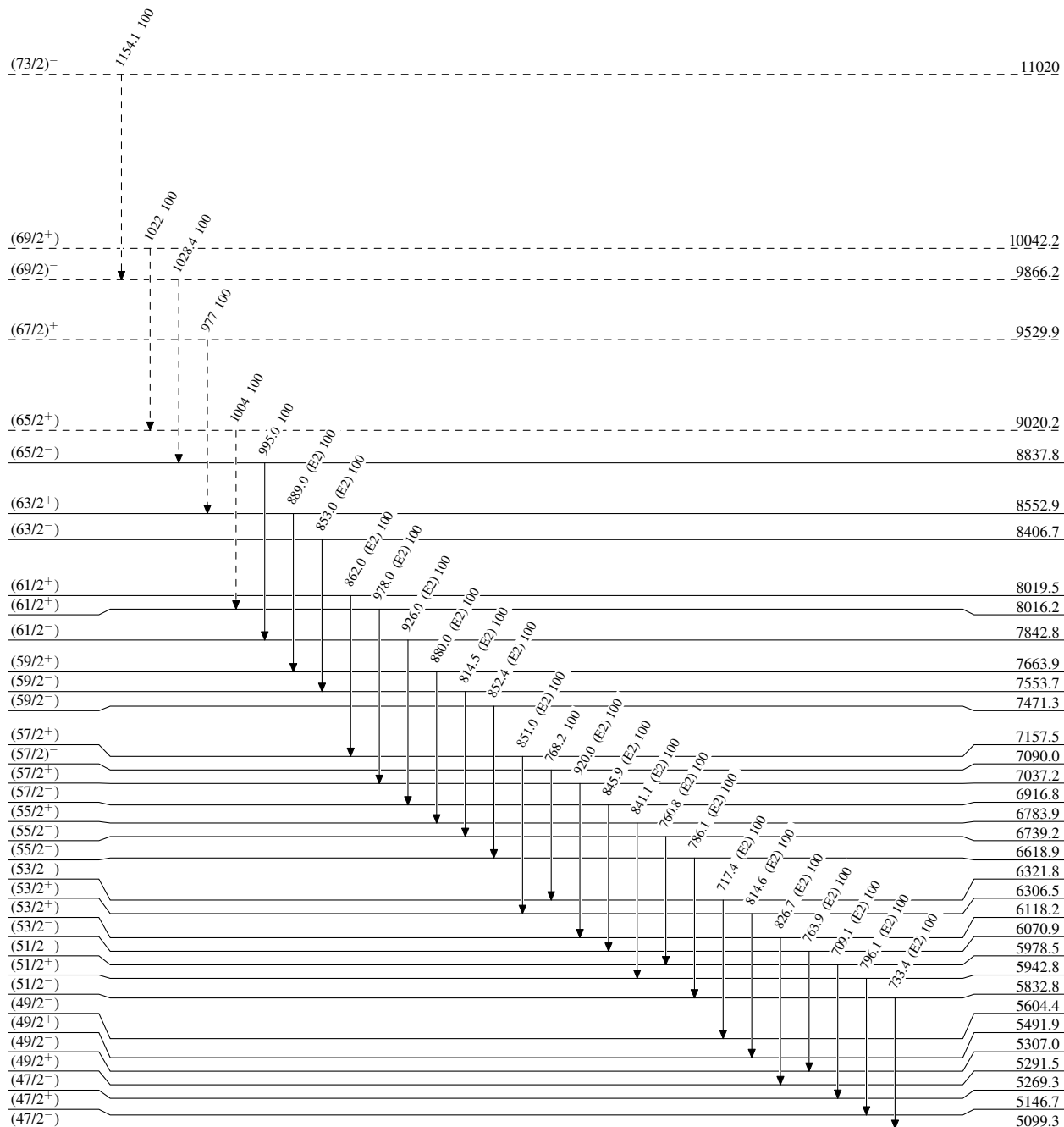
Adopted Levels, Gammas

Legend

Level Scheme

Intensities: Relative photon branching from each level

-----▶ γ Decay (Uncertain)



1/2⁻

0.0

6.5 min 3

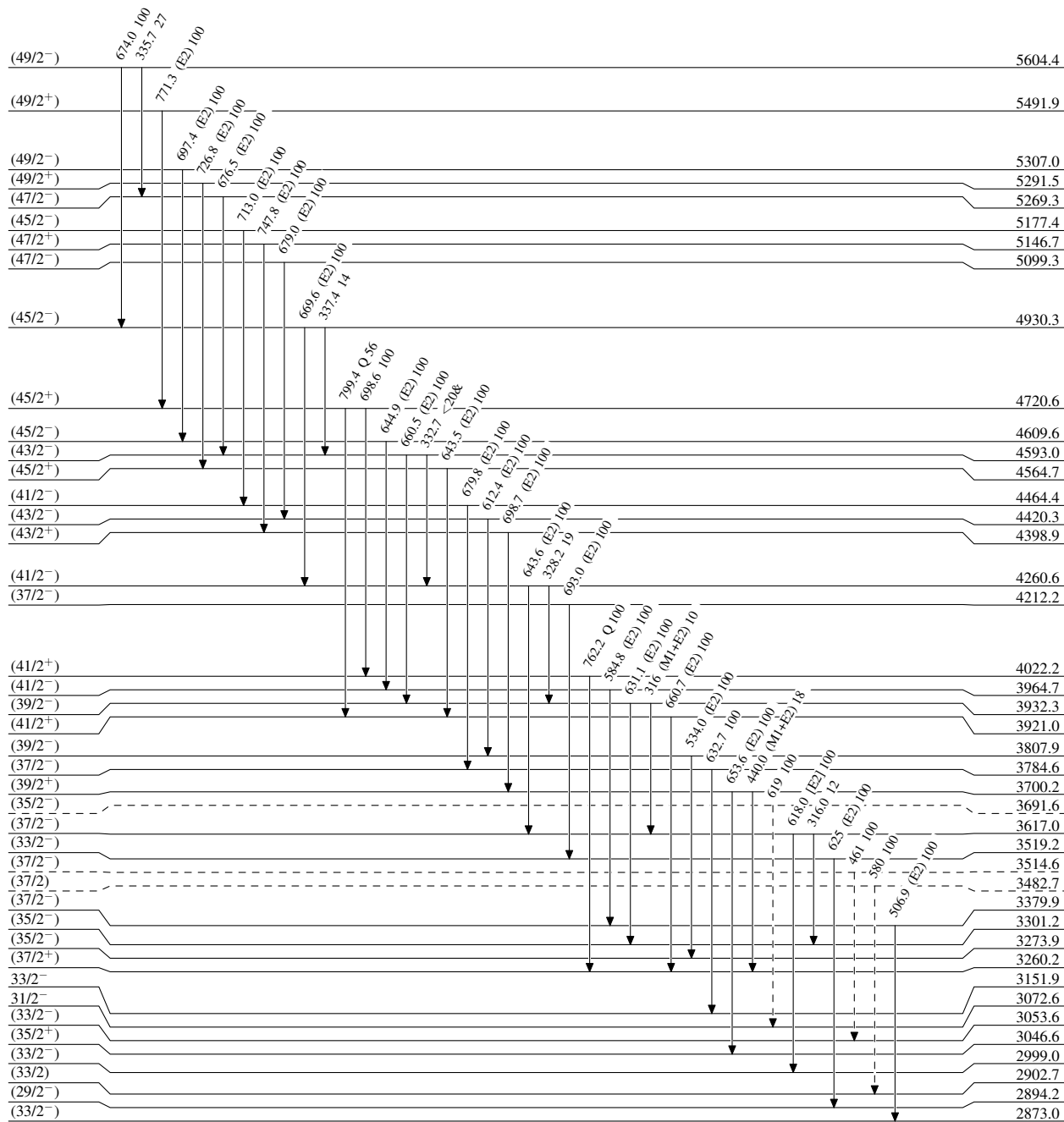
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

-----▶ γ Decay (Uncertain)



1/2⁻

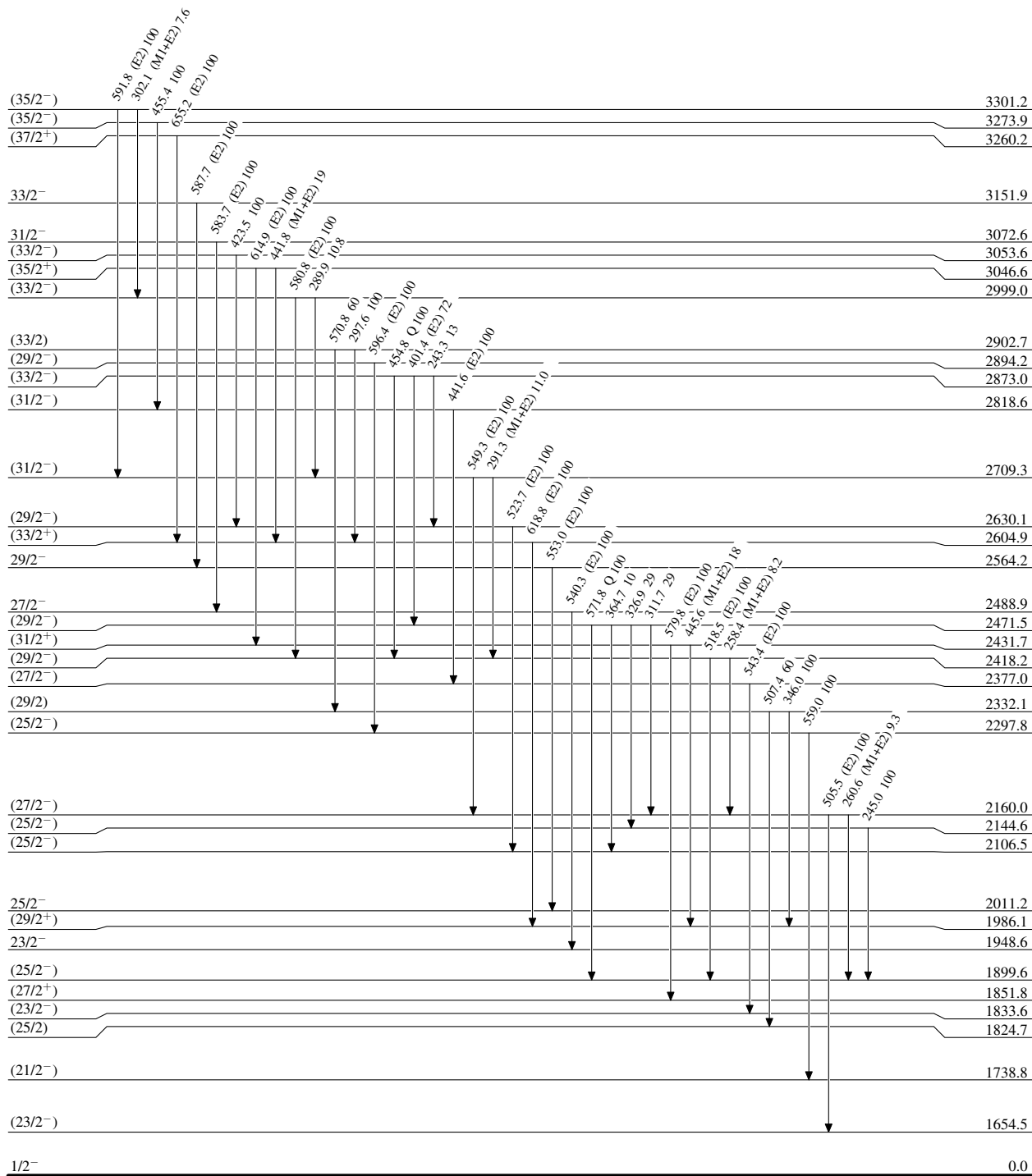
0.0

6.5 min 3

Adopted Levels, Gammas

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given



6.5 min 3

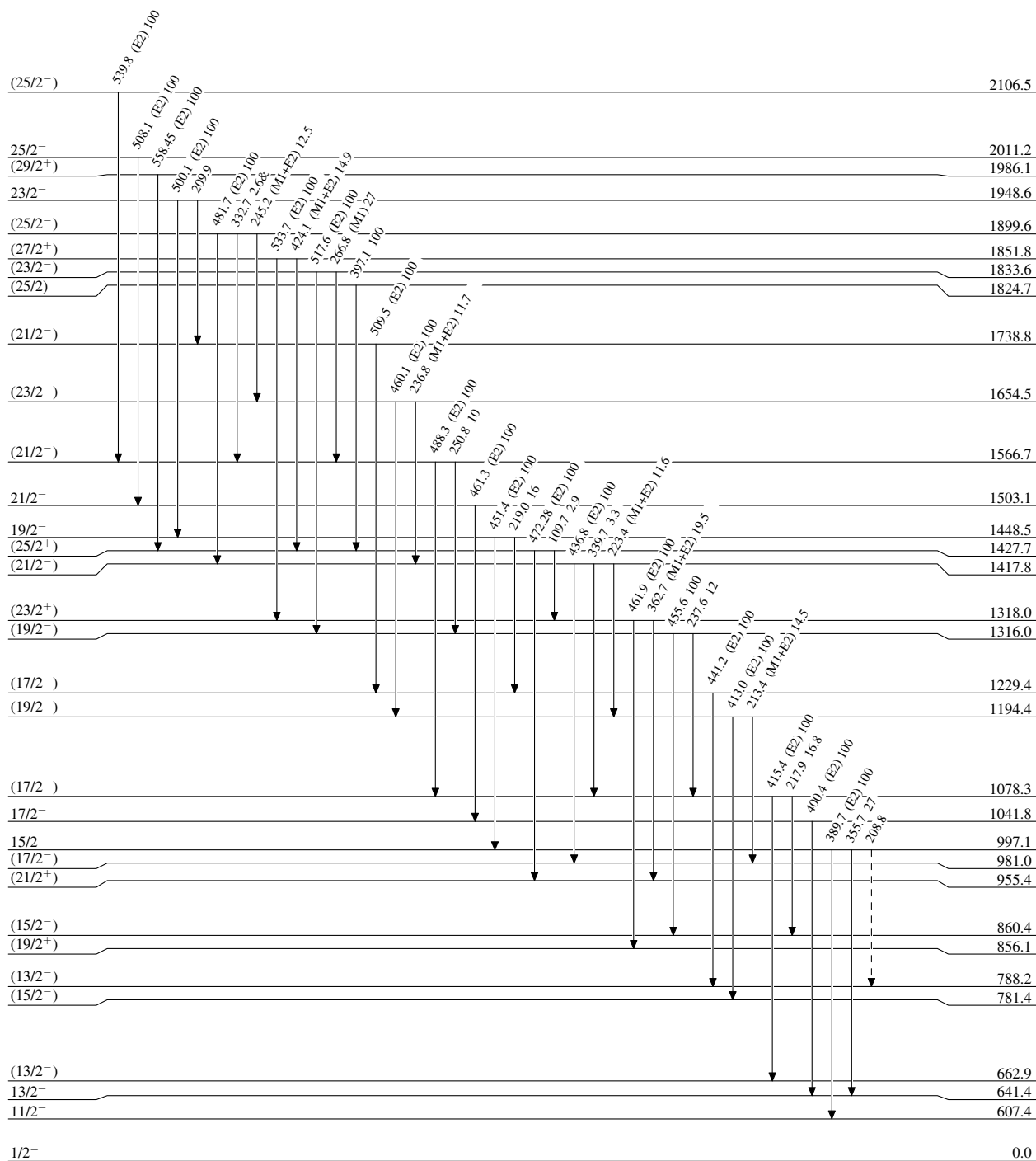
Adopted Levels, Gammas

Legend

Level Scheme (continued)

Intensities: Relative photon branching from each level
& Multiply placed: undivided intensity given

-----▶ γ Decay (Uncertain)



6.5 min 3

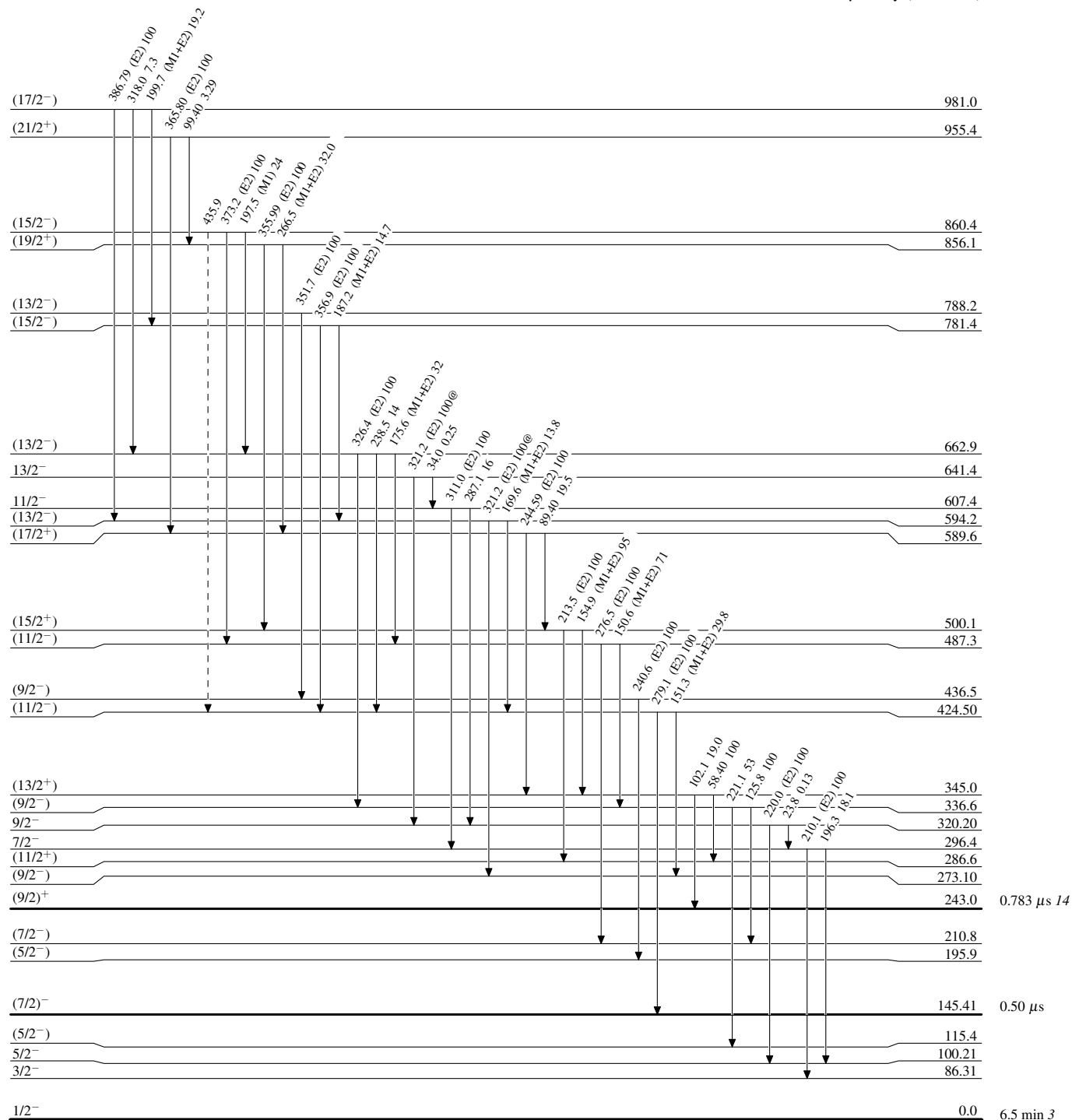
Adopted Levels, Gammas

Level Scheme (continued)

Legend

Intensities: Relative photon branching from each level
 & Multiply placed: undivided intensity given
 @ Multiply placed: intensity suitably divided

-----▶ γ Decay (Uncertain)

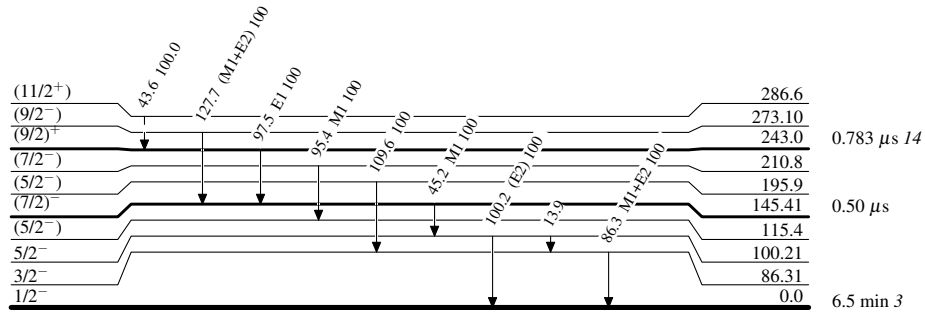


Adopted Levels, Gammas**Level Scheme (continued)**

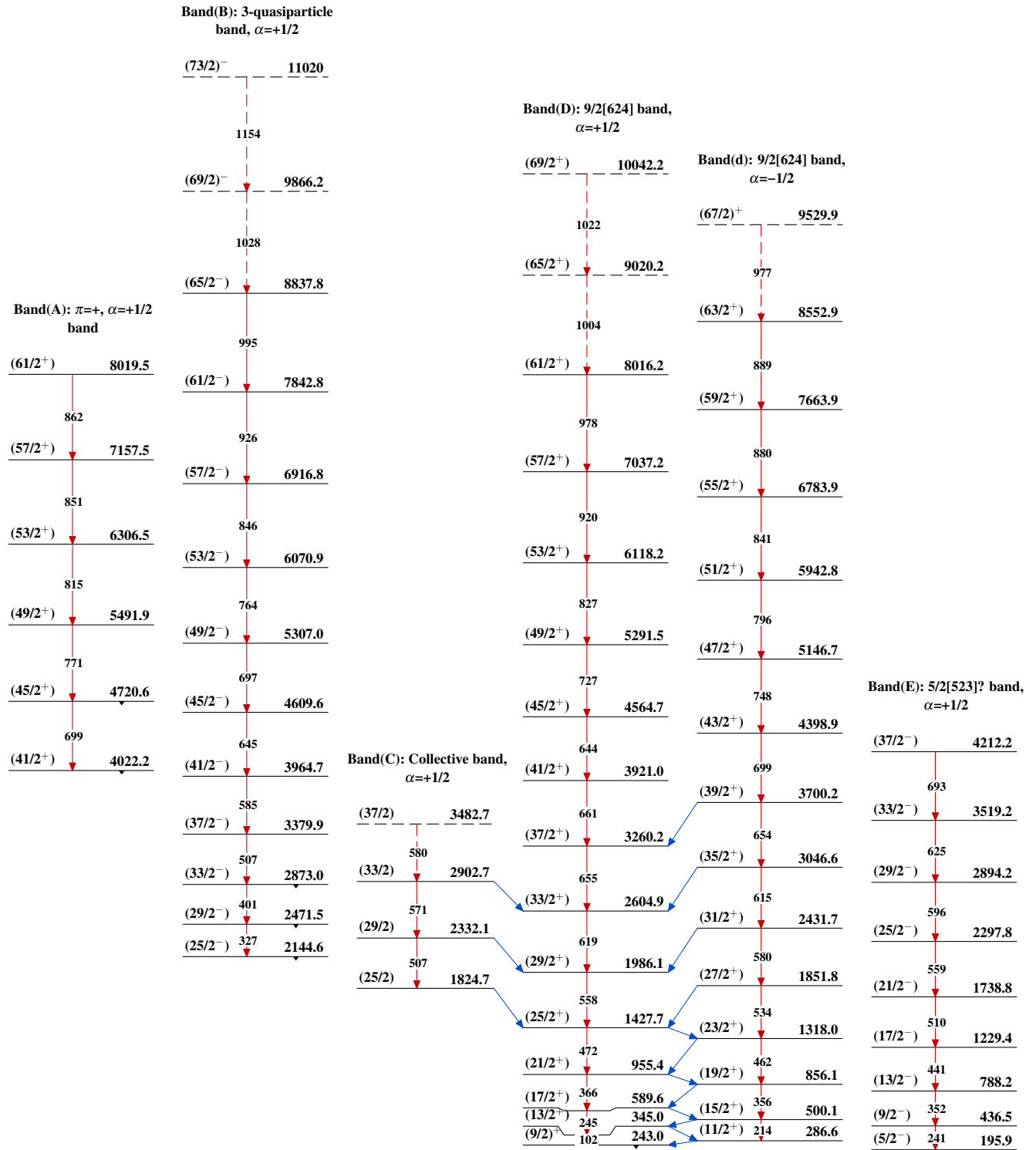
Legend

Intensities: Relative photon branching from each level
 & Multiply placed: undivided intensity given
 @ Multiply placed: intensity suitably divided

-----► γ Decay (Uncertain)

 $^{179}_{76}\text{Os}_{103}$

Adopted Levels, Gammas



Adopted Levels, Gammas (continued)