(HI,xnγ) 1993Pa07,1995Re04,1998Ob02

History			
Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 152, 331 (2018)	1-Apr-2018

Includes data from 1988So06, 1993Pa07, 1994Br15, 1995Re04 and 1998Ob02.

1998Ob02: ^{105}Pd(^{35}Cl,p3nγ) with E(^{35}Cl)=180 MeV. Measured Eγ, Iγ, γγ, γγ(θ) using Gammasphere array consisting of 57 Compton-suppressed HPGe detectors plus Microball array for light charged particle selection.

1995Re04: ^{107}Ag(^{32}S,p2nγ) with E(^{32}S)=140 MeV. Measured Eγ, Iγ, γ(t) using the CAESAR array consisting of 6 Compton-suppressed Ge detectors.

1994Br15: ^{107}Ag(^{32}S,p2nγ) with E(^{32}S)=140 MeV. Measured Eγ, Iγ, γγ, γ(θ) using the CAESAR array consisting of 6 Compton-suppressed Ge detectors, pγ coincidences using the ANU Particle Detector Ball consisting of 14 phoswich detectors.

1993Pa07: ^{94}Mo(^{46}Ti,2p2nγ) with E(^{46}Ti)=210 MeV, ^{66}Zn(^{74}Se,2p2nγ) with E(^{74}Se)=290 MeV and ^{92}Mo(^{50}Cr,α2pγ) with E(^{50}Cr)=220 MeV. Measured Eγ, Iγ, γγ γγ(θ)(DCO) using the TESSA3 array and the POLYTESSA array coupled with the Daresbury recoil separator.

1988So06: ^{107}Ag(^{32}S,p2nγ) with E(^{32}S)=125-150 MeV and ^{106}Cd(^{35}Cl,αp) with E(^{35}Cl)=145 MeV. Measured Eγ, Iγ, γγ using Ge detectors and a multiplicity filter of 6 NaI detectors, pγ coincidences using ΔE-E telescope; deduced $T_{1/2}$ from Recoil Distance Doppler-shift method (RDDM).

1987Wa02: ^{92}Mo(^{48}Ti,2p2nγ) with E(^{48}Ti)=210 MeV and ^{92}Mo(^{50}Cr,α2pγ) with E(^{50}Cr)=230 MeV. Measured Eγ, Iγ using two Compton-suppressed Ge detectors and nγ coincidences with two NE213 liquid scintillators; deduced $T_{1/2}$ from Recoil Distance Doppler-shift method (RDDM).

1986Ma39: ^{107}Ag(^{32}S,p2nγ) with E(^{32}S)=160 MeV. Measured Eγ, Iγ, γγ using two HPGe detectors, nγ coincidences using NE213 neutron counter and pγ coincidences using MOS surface-barrier Si detectors acting as ΔE counters; deduced $T_{1/2}$ from Recoil Distance Doppler-shift method (RDDM).

1985Li13: ^{92}Mo(^{48}Ti,2p2nγ) with E(^{48}Ti)=210 MeV and ^{92}Mo(^{50}Cr,α2pγ) with E(^{50}Cr)=220 and 230 MeV. Measured Eγ, Iγ, γγ using four Compton-suppressed Ge detectors, nγ coincidences with an array of 37 NE213 liquid scintillators and pγ coincidences using Si surface-barrier telescope.

Others: 1987Wa18 (search for superdeformed structures), 1989OgZY (search for 10^+ isomeric state),

^{136}Sm Levels

E(level)[†]	Jπ[‡]	$T_{1/2}$[#]	Comments
0.0[a]	0^+		
254.92[a] *16*	2^+	88 ps *9*	$T_{1/2}$: others: 132 ps *10* (1987Wa02, RDDM), 0.13 ns *1* (1986Ma39, RDDM).
686.39[a] *22*	4^+	5.0 ps *5*	$T_{1/2}$: others: 6.0 ps *4* (1987Wa02, RDDM), < 15 ps (1986Ma39, RDDM).
712.88[c] *16*	2^+		
1171.02[c] *22*	4^+		
1221.4[a] *3*	6^+	1.5 ps *5*	$T_{1/2}$: other: 2.22 ps *28* (1987Wa02, RDDM).
1640.99[c] *24*	6^+		
1798.9[a] *4*	8^+	1.0 ps *3*	$T_{1/2}$: other: <2.1 ps (1987Wa02).
2250.3[c] *3*	8^+		
2264.8[f] *11*	(8^-)	15 μs *1*	$T_{1/2}$: from beam-γ(t) (1994Br15). Jπ: from intensity pattern, absence of branch to 6^+ yrast level, and systematics of N=74 nuclei.
2275.4[&] *4*	7^-		
2414.6[a] *4*	10^+	0.9 ps *3*	$T_{1/2}$: others: 1.32 ps *24* (1987Wa02), < 2 ps (1986Ma39, RDDM).
2678.6[f] *13*	(9^-)		
2738.2[&] *4*	9^-		
2768.2[@] *4*	8^-		
2953.8[c] *4*	10^+		
3091.8[a] *4*	12^+		
3111.8[f] *13*	(10^-)		
3218.1[@] *4*	10^-		

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(HI,xnγ) 1993Pa07,1995Re04,1998Ob02 (continued)

^{136}Sm Levels (continued)

E(level)[†]	Jπ[‡]	Comments
3290.7[&] *4*	11^-	
3337.5[b] *4*	12^+	
3556.3[f] *14*	(11^-)	
3682.7[c] *4*	12^+	
3828.1[a] *5*	14^+	
3888.7[e] *9*	14^+	
3892.6[@] *4*	12^-	
3921.4[&] *4*	13^-	
3991.3[b] *5*	(14^+)	
4015.1[f] *15*	(12^-)	
4169.2? *16*	(11)	E(level): the 254γ and 1058γ are observed with equal intensities, thus ordering is not definite. Reverse ordering would result in a level at 3366 keV.
4321.9 *19*	(11)	
4423.4[g] *16*	(12^+)	
4436.7[c] *5*	(14^+)	
4464.6[f] *16*	(13^-)	
4587.9[g] *18*	(13^+)	
4598.3[@] *5*	14^-	
4603.1[a] *5*	16^+	
4619.4[&] *5*	15^-	
4735.5[e] *9*	16^+	
4837.3[b] *5*	(16^+)	
4862.0[g] *18*	(14^+)	
4928.1[f] *17*	(14^-)	
5204.9[g] *19*	(15^+)	
5379.0[&] *5*	(17^-)	
5445.8[a] *6*	(18^+)	
5591.9[g] *19*	(16^+)	
5635.8[e] *9*	18^+	
5795.9[b] *6*	(18^+)	
6001.9[g] *20*		
6206.3[&] *6*	(19^-)	
6355.7[a] *6*	(20^+)	
6594.8[e] *14*	20^+	
7110.1[&] *6*	(21^-)	
7328.4[a] *6*	(22^+)	
7566.8[e] *17*	22^+	
8349.7[a] *7*	(24^+)	
8609.8[e] *20*	24^+	
5635.8+y[d]	(22^+)	E(level): Probable transition to 5635 level has not yet been identified. Jπ: from strong feeding of 18^+ member of positive parity sideband and assumption that $4\hbar$ of spin is missing in unobserved linking transitions, deduced from comparison of experimental data and theoretical calculations in this mass region (1998Ob02). Additional information 1.
6523.8+y[d] *10*	(24^+)	
7486.8+y[d] *15*	(26^+)	
8527.8+y[d] *18*	(28^+)	
9646.8+y[d] *20*	(30^+)	

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(HI,xnγ) 1993Pa07,1995Re04,1998Ob02 (continued)

^{136}Sm Levels (continued)

E(level)[†]	Jπ[‡]	Comments
10845.8+y[d] *23*	(32+)	
12124.8+y[d] *25*	(34+)	
13483.8+y[d] *3*	(36+)	
14919.8+y[d] *3*	(38+)	
16422.8+y[d] *3*	(40+)	
17989.8+y[d] *4*	(42+)	
19618.8+y?[d]	(44+)	
u[h]		E(level): ≈4000, may feed 2414, 10+ level. Additional information 2.
u+465.8[h] *15*		Level may feed 3556 (11−) level.
u+624.8[h] *9*		
u+627.1[h] *9*		
u+760.1[h] *10*	(14)	Level may feed 3922, 13− level.
u+946.9[h] *15*	(15)	
u+1197.5[h] *18*	(16)	
u+1512.3[h] *20*	(17)	
u+1888.8[h] *23*	(18)	
u+2317.8[h] *25*		

[†] From a least-squares fit to Eγ, by evaluator.
[‡] From γ-ray multipolarities and assumed band structure, as proposed by 1993Pa07,1995Re04 and 1998Ob02, except where noted.
[#] From RDDM in 1988So06, except when noted. Values from RDDM in 1987Wa02 are systematically higher than those in 1988So06. In the case of the 254.9-level, 1987Wa02 discuss two components in the decay curve, with both taken into account in their fit. For this reason, the 1988So06 values are mainly adopted here.
[@] Band(A): π=− side band 1 (1993Pa07).
[&] Band(B): π=− side band 2 (1993Pa07).
[a] Band(C): yrast band.
[b] Band(D): possible π=+ band (1993Pa07).
[c] Band(E): γ vibrational band (1993Pa07).
[d] Band(F): Highly deformed band (1998Ob02).
[e] Band(G): Side band (1998Ob02).
[f] Band(H): Band based on (8−) isomer (1995Re04).
[g] Band(I): Possible π=+ band (1995Re04).
[h] Band(J): Possible band (1995Re04).

γ(^{136}Sm)

Eγ[†]	Iγ[†]	Ei(level)	Jiπ	Ef	Jfπ	Mult.[‡]	Comments
101.5[&]	0.34[&] *11*	4423.4	(12+)	4321.9	(11)		
132.9[&]	1.6[&] *7*	u+760.1	(14)	u+627.1		D+Q	Mult.: A2=−0.14 *22* (1995Re04).
135.3[&]	2.3[&] *6*	u+760.1	(14)	u+624.8		D+Q	Mult.: A2=−0.41 *13* (1995Re04).
164.4[&]	1.0[&] *3*	4587.9	(13+)	4423.4	(12+)	D	Mult.: A2=−0.39 *20* (1995Re04).
186.8[&]	1.6[&] *7*	u+946.9	(15)	u+760.1	(14)	D+Q	Mult.: R(DCO)=0.38 *6* (1993Pa07), A2=−0.47 *19* (1995Re04).

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(HI,xnγ) 1993Pa07,1995Re04,1998Ob02 (continued)

γ(^{136}Sm) (continued)

E_γ †	I_γ †	E_i(level)	J_i^π	E_f	J_f^π	Mult. ‡	Comments
246.0 *2*	1.8 *1*	3337.5	12^+	3091.8	12^+	(D+Q)	Mult.: R(DCO)=1.13 *9* (1993Pa07).
250.6&	1.4& *7*	u+1197.5	(16)	u+946.9	(15)	D+Q	Mult.: R(DCO)=0.43 *8* (1993Pa07).
254.4&*a*	1.7& *7*	4423.4	(12^+)	4169.2?	(11)		
254.9 *2*	119.7 *11*	254.92	2^+	0.0	0^+	Q	Mult.: R(DCO)=1.01 *2* (1993Pa07), A_2=+0.28 *4* (1995Re04).
274.0&	1.8& *8*	4862.0	(14^+)	4587.9	(13^+)	D	Mult.: A_2=−0.83 *14* (1995Re04).
294.3&	1.0& *5*	u+760.1	(14)	u+465.8		D+Q	Mult.: A_2=−0.39 *16* (1995Re04).
314.8&	1.1& *6*	u+1512.3	(17)	u+1197.5	(16)	D+Q	Mult.: R(DCO)=0.25 *4* (1993Pa07), A_2=−0.71 *19* (1995Re04).
342.8&	1.4& *6*	5204.9	(15^+)	4862.0	(14^+)	D	Mult.: A_2=−0.56 *23* (1995Re04).
376.5& *2*	1.0& *5*	u+1888.8	(18)	u+1512.3	(17)	D+Q	Mult.: R(DCO)=0.37 *9* (1993Pa07),
387.0&	0.9& *3*	5591.9	(16^+)	5204.9	(15^+)		
410.0&	0.8& *5*	6001.9		5591.9	(16^+)		
413.8&	6.5& *25*	2678.6	(9^-)	2264.8	(8^-)	D	Mult.: A_2=−0.69 *12* (1995Re04).
429.0	0.15 *2*	u+2317.8		u+1888.8	(18)		E_γ: Observed by 1993Pa07 only.
431.4 *2*	111.5 *8*	686.39	4^+	254.92	2^+	Q	Mult.: R(DCO)=1.16 *3* (1993Pa07), A_2=+0.35 *3* (1995Re04).
433.2&	3.8& *8*	3111.8	(10^-)	2678.6	(9^-)		
438.8&	<0.1&	4862.0	(14^+)	4423.4	(12^+)		
444.5&	2.2& *6*	3556.3	(11^-)	3111.8	(10^-)		
449.3&	1.0& *5*	4464.6	(13^-)	4015.1	(12^-)		
450.1 *2*	4.7 *2*	3218.1	10^-	2768.2	8^-	Q	Mult.: R(DCO)=1.23 *6* (1993Pa07).
458.0 *2*	2.2 *4*	712.88	2^+	254.92	2^+		Mult.: R(DCO)=0.85 *4* for 458γ and 458.2γ doublet (1993Pa07).
458.2 *2*	9.1 *5*	1171.02	4^+	712.88	2^+	Q	Mult.: R(DCO)=0.85 *4* for 458γ and 458.2γ doublet (1993Pa07).
458.9&	1.6& *5*	4015.1	(12^-)	3556.3	(11^-)		
462.9 *2*	4.6 *2*	2738.2	9^-	2275.4	7^-	Q	Mult.: R(DCO)=1.18 *5* (1993Pa07).
463.4&	0.8& *5*	4928.1	(14^-)	4464.6	(13^-)		
465.9&	9& *3*	2264.8	(8^-)	1798.9	8^+		
470.0 *2*	4.9 *3*	1640.99	6^+	1171.02	4^+	Q	Mult.: R(DCO)=1.15 *5* (1993Pa07).
479.6 *2*	1.3 *2*	3218.1	10^-	2738.2	9^-	D	Mult.: R(DCO)=0.2 *1* (1993Pa07).
484.6 *2*	3.0 *2*	1171.02	4^+	686.39	4^+		Mult.: R(DCO)=0.87 *4* (1993Pa07).
492.9 *2*	0.4 *2*	2768.2	8^-	2275.4	7^-	D	Mult.: R(DCO)=0.59 *3* (1993Pa07).
535.0 *2*	108.2 *7*	1221.4	6^+	686.39	4^+	Q	Mult.: R(DCO)=1.18 *2* (1993Pa07), A_2=+0.37 *5* (1995Re04).
552.8 *2*	9.7 *3*	3290.7	11^-	2738.2	9^-	Q	Mult.: R(DCO)=1.08 *5* (1993Pa07).
577.3 *2*	100.4 *6*	1798.9	8^+	1221.4	6^+	Q	Mult.: R(DCO)=1.17 *2* (1993Pa07), A_2=+0.35 *5* (1995Re04).
609.3 *2*	6.4 *3*	2250.3	8^+	1640.99	6^+	Q	Mult.: R(DCO)=1.03 *3* (1993Pa07).
615.4 *2*	73.8 *5*	2414.6	10^+	1798.9	8^+	Q	Mult.: R(DCO)=1.17 *2* (1993Pa07), A_2=+0.38 *7* (1995Re04).
617.0&	<0.2&	5204.9	(15^+)	4587.9	(13^+)		
624.9&	0.6& *3*	u+624.8		u			
627.0&	0.6& *3*	u+627.1		u			
630.7 *2*	10.6 *3*	3921.4	13^-	3290.7	11^-	Q	Mult.: R(DCO)=1.22 *8* (1993Pa07), A_2=+0.39 *19* (1995Re04).
674.5 *2*	4.6 *4*	3892.6	12^-	3218.1	10^-	Q	Mult.: R(DCO)=1.01 *5* (1993Pa07).
677.5 *2*	57.4 *5*	3091.8	12^+	2414.6	10^+	Q	Mult.: R(DCO)=1.04 *2* (1993Pa07), A_2=+0.40 *10* (1995Re04).
698.0 *2*	9.1 *3*	4619.4	15^-	3921.4	13^-	Q	Mult.: R(DCO)=0.95 *5* (1993Pa07).

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(HI,xnγ) 1993Pa07,1995Re04,1998Ob02 (continued)

γ(^{136}Sm) (continued)

E_γ[†]	I_γ[†]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	Comments
703.5 *2*	6.5 *4*	2953.8	10^+	2250.3	8^+	Q	Mult.: R(DCO)=0.96 *5* (1993Pa07).
705.7 *2*	2.5 *5*	4598.3	14^-	3892.6	12^-	Q	Mult.: R(DCO)=1.07 *9* (1993Pa07).
712.9[#] *2*	0.9 *4*	712.88	2^+	0.0	0^+		
728.9 *2*	4.9 *3*	3682.7	12^+	2953.8	10^+	Q	Mult.: R(DCO)=1.00 *9* (1993Pa07).
729.8[&]	<0.2[&]	5591.9	(16^+)	4862.0	(14^+)		
736.3 *2*	28.7 *4*	3828.1	14^+	3091.8	12^+	Q	Mult.: R(DCO)=0.96 *4* (1993Pa07), A_2=+0.44 *14* (1995Re04).
754.0 *2*	3.0 *3*	4436.7	(14^+)	3682.7	12^+	(Q)	Mult.: R(DCO)=0.8 *2* (1993Pa07).
759.6 *2*	5.8 *3*	5379.0	(17^-)	4619.4	15^-		
775.0 *2*	18.4 *4*	4603.1	16^+	3828.1	14^+	Q	Mult.: R(DCO)=0.89 *8* (1993Pa07), A_2=+0.17 *19* (1995Re04).
797[@]		3888.7	14^+	3091.8	12^+	Q	Mult.: R(DCO)=1.22 *5* (1998Ob02).
797.0[&]	<0.2[&]	6001.9		5204.9	(15^+)		
827.3 *2*	5.5 *3*	6206.3	(19^-)	5379.0	(17^-)		
842.7 *2*	12.5 *4*	5445.8	(18^+)	4603.1	16^+		
846.0 *2*	6.6 *4*	4837.3	(16^+)	3991.3	(14^+)	Q	Mult.: R(DCO)=1.21 *8* (1993Pa07).
847[@]		4735.5	16^+	3888.7	14^+		
847.1[&]	1.6[&] *5*	3111.8	(10^-)	2264.8	(8^-)		
866.8[&]	1.7[&] *7*	4423.4	(12^+)	3556.3	(11^-)		
875.7 *2*	3.9 *3*	3290.7	11^-	2414.6	10^+	D	Mult.: R(DCO)=0.96 *7* (1993Pa07).
877.5[&]	1.6[&] *5*	3556.3	(11^-)	2678.6	(9^-)		
888[@]		6523.8+y	(24^+)	5635.8+y	(22^+)		
899.5 *2*	8.8 *4*	3991.3	(14^+)	3091.8	12^+		
900[@]		5635.8	18^+	4735.5	16^+		
903.2[&]	1.4[&] *5*	4015.1	(12^-)	3111.8	(10^-)		
903.8 *2*	3.8 *3*	7110.1	(21^-)	6206.3	(19^-)		
907[@]		4735.5	16^+	3828.1	14^+		
908.4[&]	1.6[&] *5*	4464.6	(13^-)	3556.3	(11^-)		
909.9 *2*	8.1 *3*	6355.7	(20^+)	5445.8	(18^+)		
913.1[&]	0.9[&] *6*	4928.1	(14^-)	4015.1	(12^-)		
922.5 *2*	6.0 *4*	3337.5	12^+	2414.6	10^+	Q	Mult.: R(DCO)=1.14 *9* (1993Pa07).
939.4 *2*	10.2 *4*	2738.2	9^-	1798.9	8^+	D	Mult.: R(DCO)=0.67 *2* (1993Pa07), A_2=−0.41 *10* (1995Re04).
954.6 *2*	2.7 *4*	1640.99	6^+	686.39	4^+	Q	Mult.: R(DCO)=1.2 *1* (1993Pa07).
958.6 *2*	4.3 *3*	5795.9	(18^+)	4837.3	(16^+)		
959[@]		6594.8	20^+	5635.8	18^+		
963[@]		7486.8+y	(26^+)	6523.8+y	(24^+)		
969.5 *2*	3.9 *5*	2768.2	8^-	1798.9	8^+	(D)	Mult.: R(DCO)=1.11 *5* consistent with stretched Q or pure non-stretched D. Observed decay of π=− side band 1 into π=− side band 2 support the latter (1993Pa07).
972[@]		7566.8	22^+	6594.8	20^+		
972.7 *2*	4.8 *4*	7328.4	(22^+)	6355.7	(20^+)		
1021.3 *2*	1.6 *3*	8349.7	(24^+)	7328.4	(22^+)		
1028.8 *2*	3.2 *4*	2250.3	8^+	1221.4	6^+		
1033[@]		5635.8	18^+	4603.1	16^+		
1041[@]		8527.8+y	(28^+)	7486.8+y	(26^+)		
1043[@]		8609.8	24^+	7566.8	22^+		
1054.1 *2*	6.3 *5*	2275.4	7^-	1221.4	6^+	D	Mult.: R(DCO)=0.62 *3* (1993Pa07), A_2=−0.22 *10* (1995Re04).
1057.7[&a]	1.4[&] *6*	4169.2?	(11)	3111.8	(10^-)		

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(HI,xnγ) 1993Pa07,1995Re04,1998Ob02 (continued)

$\gamma(^{136}Sm)$ (continued)

E_γ †	E_i(level)	J_i^π	E_f	J_f^π	E_γ †	E_i(level)	J_i^π	E_f	J_f^π
1119@	9646.8+y	(30^+)	8527.8+y	(28^+)	1436@	14919.8+y	(38^+)	13483.8+y	(36^+)
1149@a	6594.8	20^+	5445.8	(18^+)	1503@	16422.8+y	(40^+)	14919.8+y	(38^+)
1199@	10845.8+y	(32^+)	9646.8+y	(30^+)	1567@	17989.8+y	(42^+)	16422.8+y	(40^+)
1279@	12124.8+y	(34^+)	10845.8+y	(32^+)	1629@a	19618.8+y?	(44^+)	17989.8+y	(42^+)
1359@	13483.8+y	(36^+)	12124.8+y	(34^+)					

† From ^{92}Mo(^{50}Cr,α2p) (1993Pa07), except where noted.
‡ From R(DCO) (1993Pa07), R(DCO) (1998Ob02), and $\gamma(\theta)$ (1995Re04), as indicated in the comments.
# Doublet with a strong transition in ^{139}Eu.
@ From 1998Ob02.
& From 1995Re04. Iγ from 1995Re04 are multiplied by 0.1145=Iγ_{255}(1993Pa07)/Iγ_{255}(1995Re04).
a Placement of transition in the level scheme is uncertain.

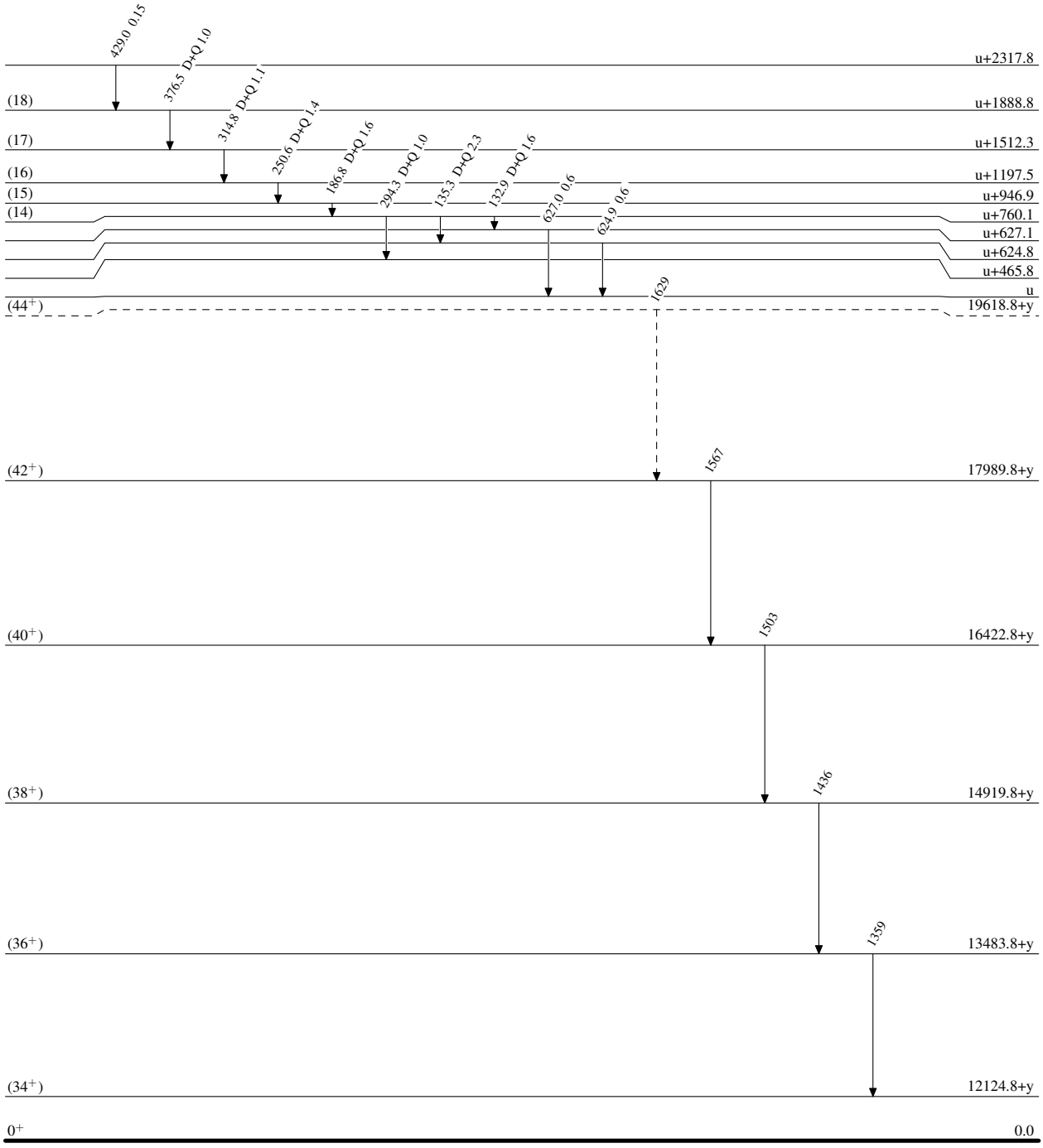
(HI,xnγ) 1993Pa07,1995Re04,1998Ob02

Level Scheme

Intensities: Type not specified

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)



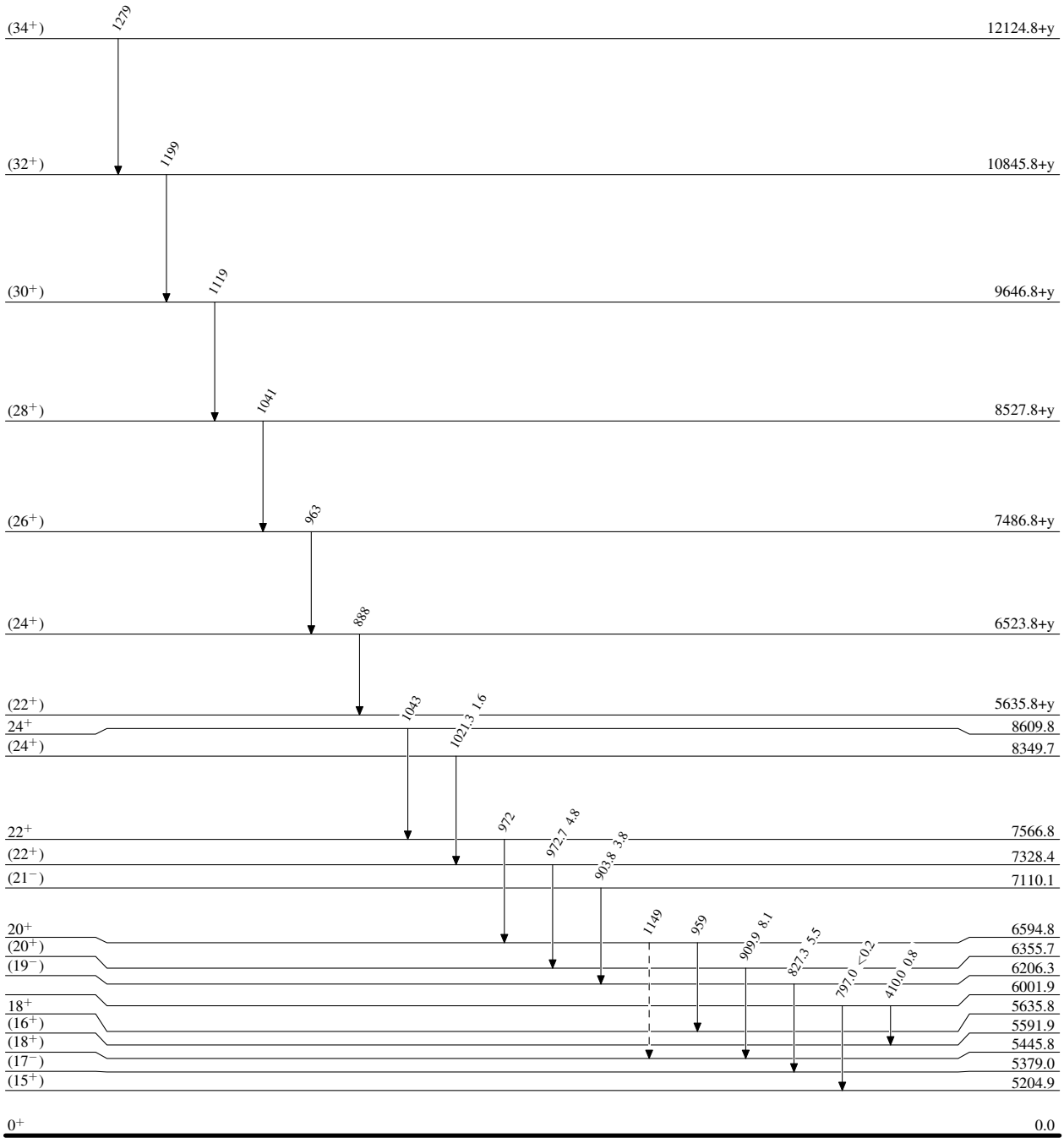
$^{136}_{62}Sm_{74}$

(HI,xnγ) 1993Pa07,1995Re04,1998Ob02

Level Scheme (continued)

Intensities: Type not specified

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)



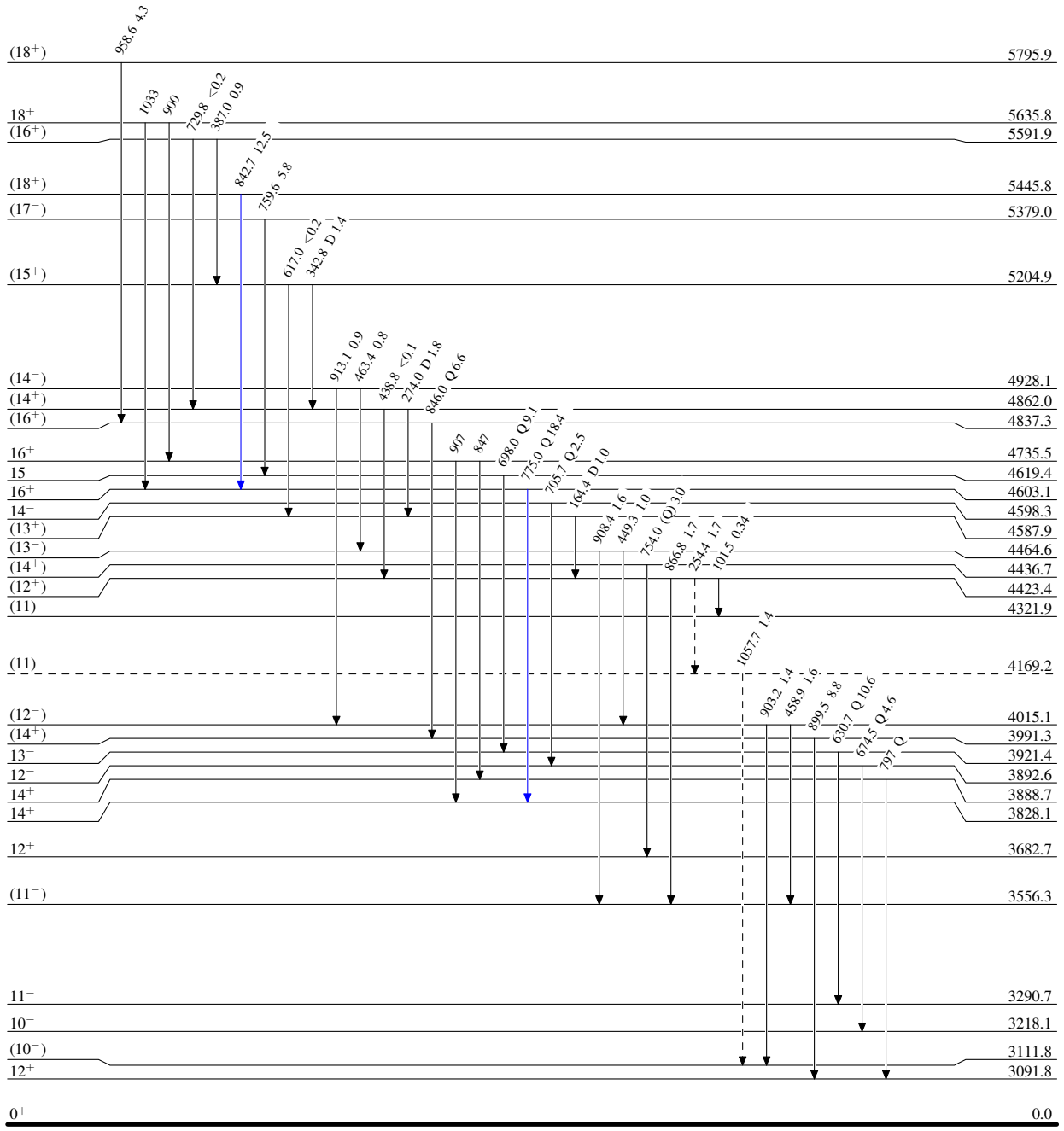
$^{136}_{62}Sm_{74}$

(HI,xnγ) 1993Pa07,1995Re04,1998Ob02

Level Scheme (continued)

Intensities: Type not specified

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)



$^{136}_{62}Sm_{74}$

(HI,xnγ) 1993Pa07,1995Re04,1998Ob02

Level Scheme (continued)

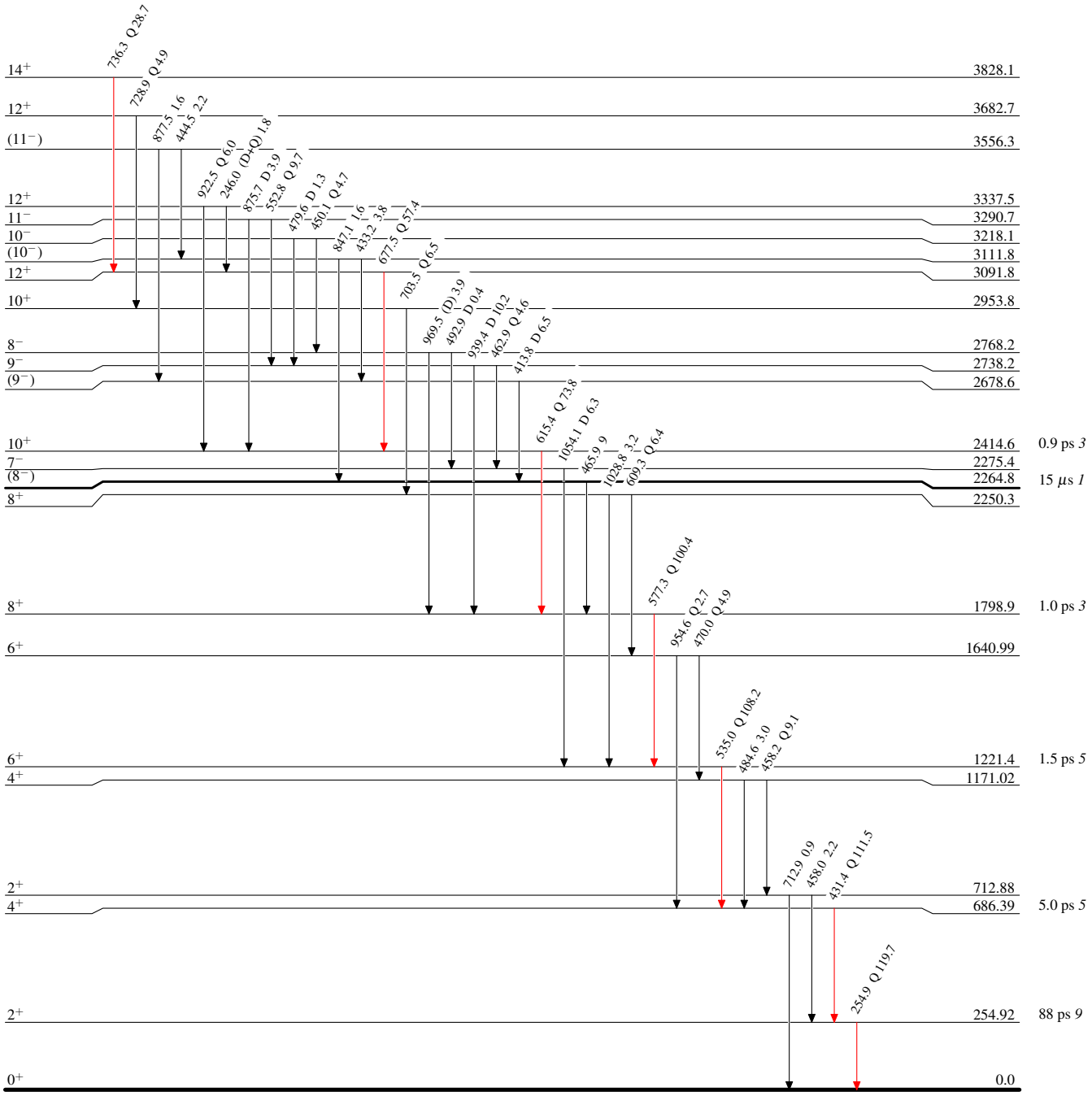
Intensities: Type not specified

Legend

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

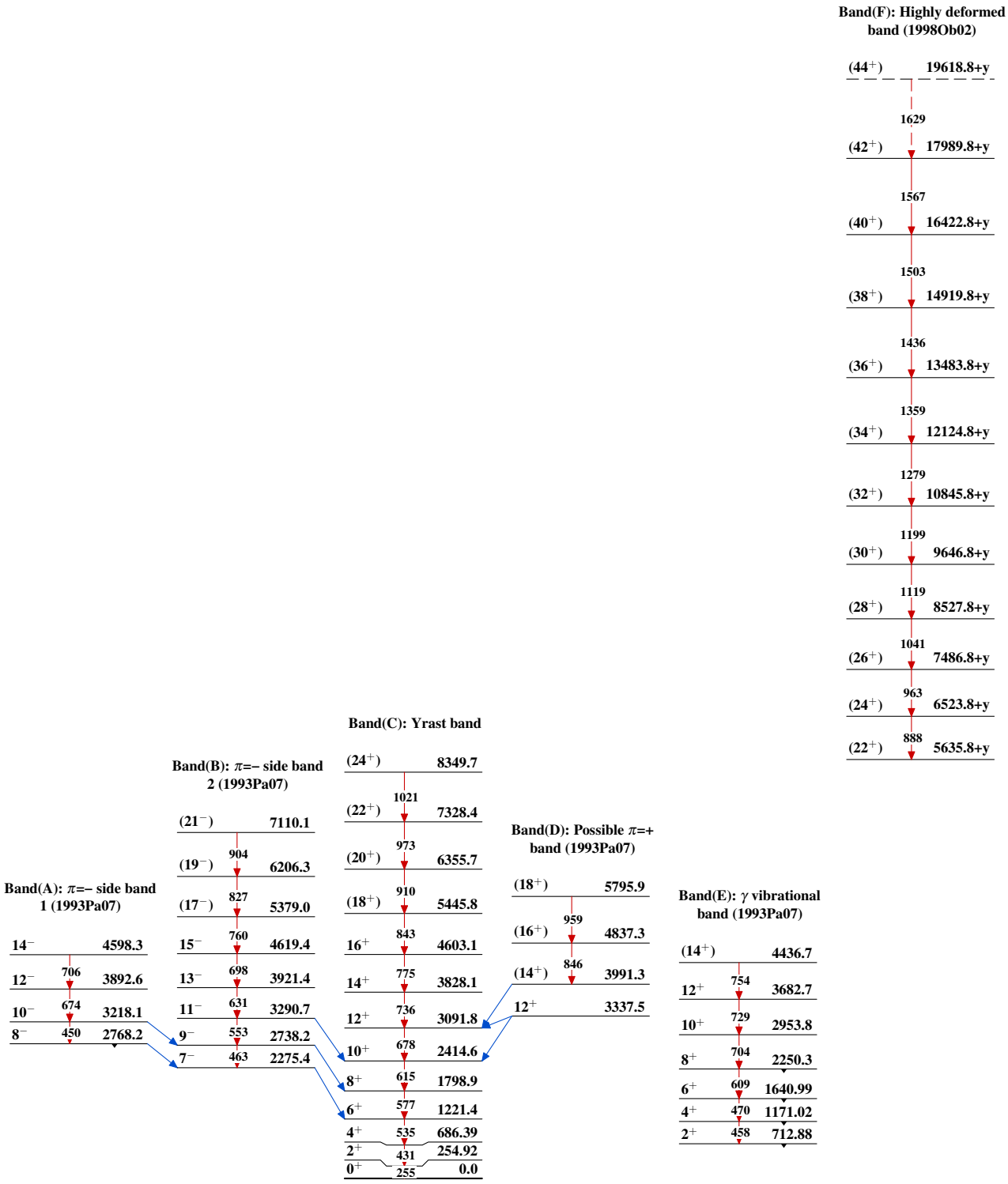
$I_\gamma < 10\% \times I_\gamma^{max}$

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



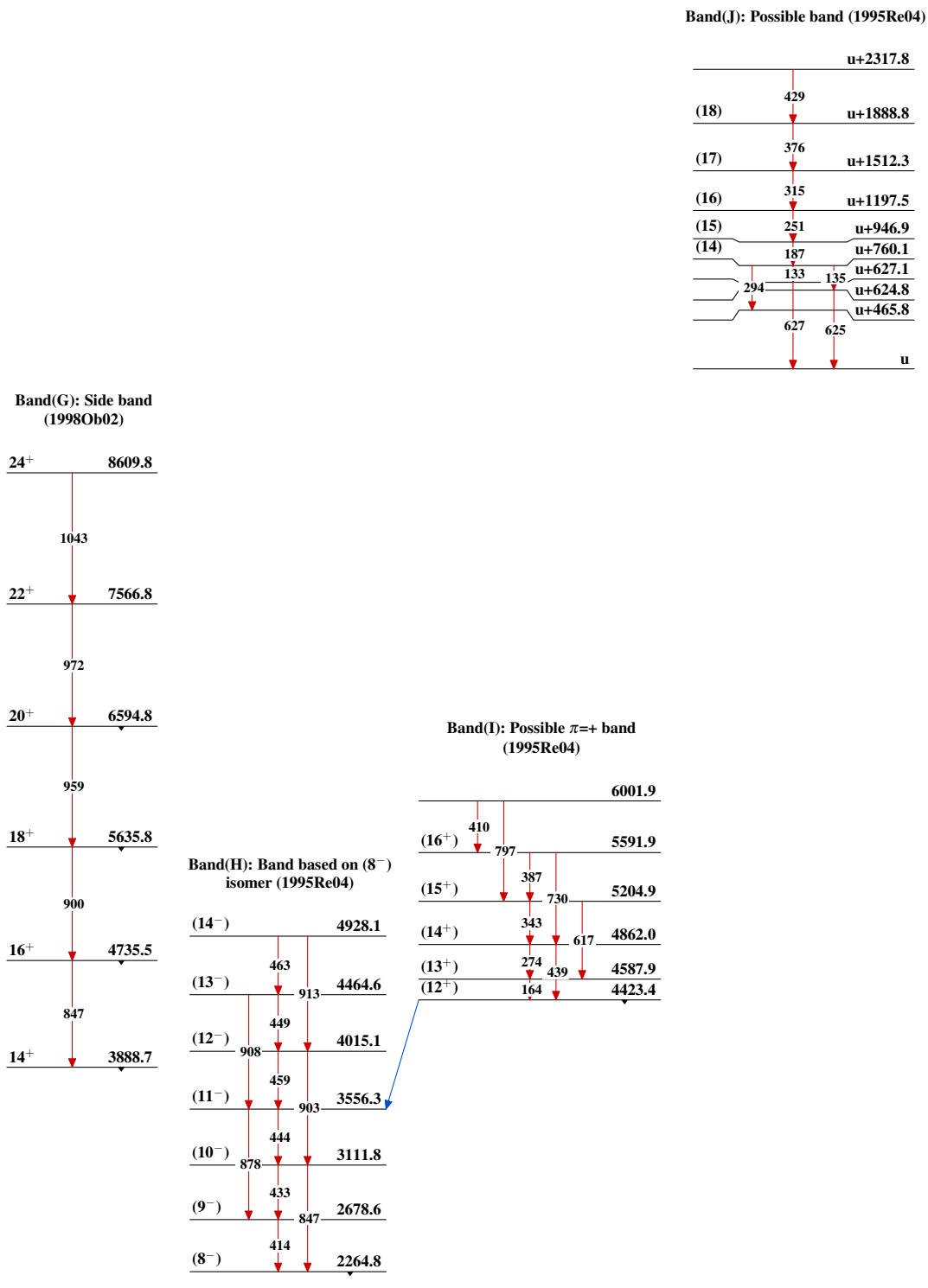
$^{136}_{62}Sm_{74}$

(HI,xnγ) 1993Pa07,1995Re04,1998Ob02



$^{136}_{62}Sm_{74}$

(HI,xnγ) 1993Pa07,1995Re04,1998Ob02 (continued)



$^{136}_{62}Sm_{74}$