(HI,xnγ)

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	D. M. Symochko, E. Browne, J. K. Tuli	NDS 110,2945 (2009)	1-Dec-2008

2002Mo20: ^{107}Ag(^{16}O,p3nγ) E=85 MeV. 11 HPGe detectors with BGO Compton-suppressed shields, including one low energy photon (LEP) detector; enriched target, thickness 6.6 mg/cm^2. Measured γ, γγ, γγ(θ)(DCO), experimental Routhians.

2000Hu12: ^{106}Cd(^{16}O,2pnγ) E=67-80, 7 BGO Compton suppressed HPGe detectors, planar HPGe detector, 14 element BGO crystal ball (as multiplicity filter); enriched target, thickness 2.0 mg/cm^2. Measured γ, γγ.

1998Sc48: ^{96}Mo(^{27}Al,p3nγ) E=133 MeV, 25 Ge detector array with BGO Compton-suppressed shields; enriched target (≥98%), thickness 0.5 mg/cm^2. Measured γ, γγ, γγ(θ)(DCO).

1982Ba31: ^{110}Cd(^{12}C,3nγ) E=51-75 MeV; enriched target (92.9%), thickness 5.7 mg/cm^2. Measured γ, γγ, γγ(t), γ(θ) at 4 angles (θ=40°−90° with a coaxial detector and θ=90°−145° with a planar detector), σ(E).

1989Ja02: ^{95}Mo(^{27}Al,p2nγ) E=105 MeV, 8 Ge detector array, 6 NaI detector (as multiplicity filter); enriched target, thickness 2.0 mg/cm^2. Measured γ, γγ, γ(θ).

1981Ch01: ^{106}Cd(^{16}O,2pnγ) E=72 MeV, coaxial Ge(Li) detectors. Measured γ, γγ, γγ(t), γ(t), γ(θ).

1985ChZY: ^{104}Pd(^{19}F,p3nγ) E=81 MeV; enriched target, thickness ≈0.5 mg/cm ^{2}. Measured $T_{1/2}$ by RDM at 0°.

Level scheme is mainly from that of 1998Sc48.

^{119}Xe Levels

E(level)[†]	Jπ[#]	$T_{1/2}$[‡]	Comments
0.0	(5/2$^+$)		
169.26 *9*	(5/2$^+$)		
176.05 *5*	(7/2$^-$)	20 ns *4*	$T_{1/2}$: from γγ(t) (1982Ba31).
197.10 *20*	(5/2$^-$,7/2$^-$)		
225.12 *5*	(7/2$^+$)		
243.35 *11*	(11/2$^-$)	27 ns *5*	$T_{1/2}$: from γγ(t) (1982Ba31).
246.35 *11*	(9/2$^-$)	<4 ns	$T_{1/2}$: from γγ(t) (1982Ba31).
257.81 *11*	(7/2$^+$)		
459.40 *12*	(9/2$^+$)		
484.42 *11*	(9/2$^+$)		
645.05 *16*	(13/2$^-$)		
649.35 *14*	(15/2$^-$)	≈16 ps	
671.62 *17*	(11/2$^+$)		
758.76 *17*	(11/2$^+$)		
929.00[@] *23*	(13/2$^+$)		
938.33 *23*	(+)		
1002.7[&] *4*	(13/2$^-$)		
1069.02 *18*	(13/2$^+$)		
1202.7 *3*	(15/2$^+$)		
1224.36 *20*	(19/2$^-$)	≈1.8 ps	
1229.56 *21*	(17/2$^-$)		
1365.8[&] *3*	(15/2$^-$)		
1396.49 *23*	(15/2$^+$)		
1507.9[@] *3*	(17/2$^+$)		
1562.0[&] *3*	(17/2$^-$)		
1745.36 *25*	(17/2$^+$)		
1832.7 *4*	(19/2$^+$)		
1932.55 *25*	(23/2$^-$)	≈1.1 ps	
1934.2[&] *3*	(19/2$^-$)		
1951.90 *22*	(21/2$^-$)		
2108.3[@] *3*	(19/2$^+$)		
2176.0[@] *4*	(21/2$^+$)		

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(HI,xnγ) (continued)

^{119}Xe Levels (continued)

E(level)†	Jπ#	E(level)†	Jπ#	E(level)†	Jπ#	E(level)†	Jπ#
2241.3& 3	(21/2−)	3873.2& 5	(29/2−)	6116.1 8	(41/2+)	9056.1 8	(53/2+)
2456.4 3	(21/2+)	3876.2 4	(31/2+)	6200.3 6	(41/2+)	9326.9? 15	(53/2+)
2536.2 4	(23/2+)	3943.9@ 5	(31/2+)	6564.3 6	(43/2+)	9384.7 10	(53/2+)
2618.4& 4	(23/2−)	4068.1 10	(31/2+)	6585.6@ 15	(43/2−)	9827.9 16	(55/2−)
2752.6 3	(27/2−)	4254.0 4	(33/2+)	6614.6 10	(43/2+)	9991.6 10	(55/2+)
2782.9@ 3	(25/2−)	4375.1 6	(33/2+)	6774.9 7	(43/2+)	10183.1 13	(57/2+)
2783.3 3	(23/2+)	4438.1 5	(33/2+)	7085.1 7	(45/2+)	10672.7 14	(57/2+)
2846.8a 8		4553.4 6	(33/2−)	7086.9 9	(45/2+)	11071.1 16	(59/2−)
2903.2@ 4	(25/2+)	4630.4@ 11	(35/2−)	7145.5 6	(45/2+)	11309.1 17	(61/2+)
2983.0 3	(25/2+)	4666.6 4	(35/2+)	7591.7 15	(47/2−)	11310.6 11	(59/2+)
3026.5& 4	(25/2−)	4797.0@ 5	(35/2+)	7618.0 16		12042.7 18	(61/2+)
3214.5@ 4	(27/2+)	4846.3 11	(35/2+)	7630.8 7	(47/2+)	12400.1 19	(63/2−)
3236.7 4	(27/2+)	5104.0 4	(37/2+)	7657.2 11	(47/2+)	12721.6 15	(63/2+)
3314.4 10	(27/2+)	5232.0 6	(37/2+)	7849.9 12	(47/2+)	13816.1 21	(67/2−)
3388.2& 6	(27/2−)	5242.4 6	(37/2+)	8013.9 7	(49/2+)	15323.0 21	(71/2−)
3534.7 4	(29/2+)	5570.1 4	(39/2+)	8152.9 10	(49/2+)	16934.5 21	(75/2−)
3618.0 6	(29/2+)	5598.4@ 15	(39/2−)	8187.9 9	(49/2+)	18669.0 21	(79/2−)
3662.4@ 4	(31/2−)	5680.8 11	(39/2+)	8669.2 15	(51/2−)	20542.2? 24	(83/2−)
3677.1@ 3	(29/2−)	5754.7@ 5	(39/2+)	8764.7 9	(51/2+)		
3680.6 5	(29/2+)	6054.0 5	(41/2+)	8804.6 13	(51/2+)		

† E(levels) are based on a least-squares fit by the evaluators to the E(γ's).
‡ From 1985ChZY, unless otherwise noted.
# States above J>11/2, except 243-keV level, are from (HI,xnγ) studies. These J^π values are authors' assignment and are based on the mult and the expected band structure.
@ From 1989Ja02.
& From 2002Mo20.
a Assigned by 1982Ba31 to be J^π=(25/2−) as a member of a h11/2 band, but 1989Ja02 placed the member at 2784 keV.

γ(^{119}Xe)

Eγ‡	Iγ#	Ei(level)	J_i^π	Ef	J_f^π	Mult.†	Comments
67.3 1	9.0 6	243.35	(11/2−)	176.05	(7/2−)	E2	Mult.: from γ(θ) (1982Ba31).
70.3 1	2.5 4	246.35	(9/2−)	176.05	(7/2−)	M1+E2	Mult.: from γ(θ) (1982Ba31).
88.6a 1	1.1d 1	257.81	(7/2+)	169.26	(5/2+)	M1+E2	
169.3 1	8.6 5	169.26	(5/2+)	0.0	(5/2+)	M1+E2	
176.05 5	100 5	176.05	(7/2−)	0.0	(5/2+)	E1	Mult.: from γ(θ) (1982Ba31).
197.1 2	2.9 4	197.10	(5/2−,7/2−)	0.0	(5/2+)	(D)	Mult.: from γ(θ) (1982Ba31).
199.9@ 5	2.5b 3	2983.0	(25/2+)	2783.3	(23/2+)	M1+E2	
201.9@ 2	6.9b 3	459.40	(9/2+)	257.81	(7/2+)	M1+E2	
212.1@ 2	6.9b 3	671.62	(11/2+)	459.40	(9/2+)	M1+E2	
225.13 5	20.5 11	225.12	(7/2+)	0.0	(5/2+)	M1+E2	
234.4a 2	4.9d 5	459.40	(9/2+)	225.12	(7/2+)	M1+E2	
253.6@ 5	5.0b 5	3236.7	(27/2+)	2983.0	(25/2+)		
257.9@ 2	25.2b 13	257.81	(7/2+)	0.0	(5/2+)	M1+E2	
259.4 1	7.5 9	484.42	(9/2+)	225.12	(7/2+)	(M1+E2)	Mult.: from γ(θ) (1982Ba31).
273.5@ 5	6.3b 6	758.76	(11/2+)	484.42	(9/2+)	M1+E2	

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(HI,xnγ) (continued)

γ(^{119}Xe) (continued)

E_γ[‡]	I_γ[#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
290.0[@] 5	5.0[b] 5	459.40	(9/2$^+$)	169.26	(5/2$^+$)	E2	
297.6[@] 5	4.4[b] 4	3534.7	(29/2$^+$)	3236.7	(27/2$^+$)	M1+E2	
309.7 2	5.7 6	1069.02	(13/2$^+$)	758.76	(11/2$^+$)		Eγ from 1982Ba31, Iγ from 1998Sc48.
327.4[@] 5	2.5[b] 3	1396.49	(15/2$^+$)	1069.02	(13/2$^+$)	M1+E2	
342.1[@] 5	4.4[b] 4	3876.2	(31/2$^+$)	3534.7	(29/2$^+$)		
347.8[a,f] 10	2.3[d] 6	1745.36	(17/2$^+$)	1396.49	(15/2$^+$)		E_γ: no corresponding transition is reported by 1998Sc48 and 1989Ja02.
378.1[@] 5	3.2[b] 3	4254.0	(33/2$^+$)	3876.2	(31/2$^+$)	M1+E2	
398.7 2	7.9 5	645.05	(13/2$^-$)	246.35	(9/2$^-$)	E2	
401.7 2	9.1 6	645.05	(13/2$^-$)	243.35	(11/2$^-$)	M1+E2	
403[@] 1	0.6[b] 1	3618.0	(29/2$^+$)	3214.5	(27/2$^+$)	M1+E2	
406.0 1	63 3	649.35	(15/2$^-$)	243.35	(11/2$^-$)	E2	
412.2[@] 5	2.5[b] 3	4666.6	(35/2$^+$)	4254.0	(33/2$^+$)	M1+E2	
413.8[@] 2	27.1[b] 14	671.62	(11/2$^+$)	257.81	(7/2$^+$)	E2	
431.5[@] 5	1.3[b] 1	4375.1	(33/2$^+$)	3943.9	(31/2$^+$)	M1+E2	
438[@] 1	<1.3[b]	5104.0	(37/2$^+$)	4666.6	(35/2$^+$)		
445.0[@] 5	2.5[b] 3	5242.4	(37/2$^+$)	4797.0	(35/2$^+$)	M1+E2	
445[@f] 1	[e]	6200.3	(41/2$^+$)	5754.7	(39/2$^+$)		
453.6[@] 2	8.2[b] 4	3236.7	(27/2$^+$)	2783.3	(23/2$^+$)	E2	
453.9 2	3.1[d] 13	938.33	(+)	484.42	(9/2$^+$)		
458.9[@] 2	8.2[b] 4	459.40	(9/2$^+$)	0.0	(5/2$^+$)	E2	
465[@] 1	<1.3[b]	5570.1	(39/2$^+$)	5104.0	(37/2$^+$)		E_γ: 456 given by authors may be a misprint.
469.6[@] 2	19.5[b] 10	929.00	(13/2$^+$)	459.40	(9/2$^+$)	E2	
484[@] 1	<1.3[b]	6054.0	(41/2$^+$)	5570.1	(39/2$^+$)		
484.5 10	4.0 5	484.42	(9/2$^+$)	0.0	(5/2$^+$)		E_γ: given as 485.5 *10* in authors′ table, 484.5 in drawing. The 485.5 keV may be a misprint (evaluators).
526.6[@] 2	6.9[b] 3	2983.0	(25/2$^+$)	2456.4	(21/2$^+$)		
530.9[@] 2	25.8[b] 13	1202.7	(15/2$^+$)	671.62	(11/2$^+$)	E2	
533.4[@] 2	10.7[b] 5	758.76	(11/2$^+$)	225.12	(7/2$^+$)		
551.6[@] 2	7.6[b] 4	3534.7	(29/2$^+$)	2983.0	(25/2$^+$)		
559.3[&] 4	1.8[c] 2	1562.0	(17/2$^-$)	1002.7	(13/2$^-$)	E2	Mult.: from DCO(37°/79°)=1.0 2 (2002Mo20).
568.5[&] 4	1.6[c] 2	1934.2	(19/2$^-$)	1365.8	(15/2$^-$)	E2	Mult.: from DCO(37°/79°)=1.1 3 (2002Mo20).
575.0[@] 2	64[b] 3	1224.36	(19/2$^-$)	649.35	(15/2$^-$)	E2	
578.9[@] 2	17.0[b] 9	1507.9	(17/2$^+$)	929.00	(13/2$^+$)	E2	
579.9[@] 5	5.7[b] 6	1229.56	(17/2$^-$)	649.35	(15/2$^-$)	M1+E2	
584.5[@] 2	12.0[b] 6	1229.56	(17/2$^-$)	645.05	(13/2$^-$)	E2	
585.1[@] 2	10.0[b] 5	1069.02	(13/2$^+$)	484.42	(9/2$^+$)	E2	
629.9[@] 2	23.9[b] 12	1832.7	(19/2$^+$)	1202.7	(15/2$^+$)	E2	
637.9[@] 2	18.9[e] 9	1396.49	(15/2$^+$)	758.76	(11/2$^+$)	E2	
639.7[@] 2	18.9[e] 9	3876.2	(31/2$^+$)	3236.7	(27/2$^+$)	E2	
665.5[&] 4	0.8[c] 1	2618.4	(23/2$^-$)	1951.90	(21/2$^-$)	M1+E2	Mult.: from DCO(37°/79°)=0.5 2 (2002Mo20).
668.1[@] 2	14.5[b] 7	2176.0	(21/2$^+$)	1507.9	(17/2$^+$)	E2	
675.1[@] 2	10.0[b] 5	2783.3	(23/2$^+$)	2108.3	(19/2$^+$)	E2	
676.3[@] 2	10.0[b] 5	1745.36	(17/2$^+$)	1069.02	(13/2$^+$)	E2	
678.2[@] 2	10.7[b] 5	3214.5	(27/2$^+$)	2536.2	(23/2$^+$)	E2	

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(HI,xnγ) (continued)

γ(^{119}Xe) (continued)

E_γ[‡]	I_γ[#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
679.4[&] 3	3.4[c] 3	2241.3	(21/2$^-$)	1562.0	(17/2$^-$)	E2	Mult.: from DCO(37°/79°)=1.1 2 (2002Mo20).
686.4[&] 3	4.0[c] 4	2618.4	(23/2$^-$)	1932.55	(23/2$^-$)	E2	Mult.: from DCO(37°/79°)=1.0 2 (2002Mo20).
703.4[@] 2	22.0[b] 11	2536.2	(23/2$^+$)	1832.7	(19/2$^+$)	E2	
704.5[&] 4	1.7[c] 2	1934.2	(19/2$^-$)	1229.56	(17/2$^-$)	M1+E2	Mult.: from DCO(37°/79°)=0.6 2 (2002Mo20).
708.2[@] 2	56[b] 3	1932.55	(23/2$^-$)	1224.36	(19/2$^-$)	E2	
709.7[&] 4	0.8[c] 1	1934.2	(19/2$^-$)	1224.36	(19/2$^-$)		
711.0[@] 2	8.8[b] 4	2456.4	(21/2$^+$)	1745.36	(17/2$^+$)	E2	
712.0[@] 2	10.7[b] 5	2108.3	(19/2$^+$)	1396.49	(15/2$^+$)	E2	
713.3[a] 10	2.9[d] 6	938.33	($^+$)	225.12	(7/2$^+$)		
716[@] 1	3.8[b] 4	3618.0	(29/2$^+$)	2903.2	(25/2$^+$)	E2	
716.6[&] 4	0.6[c] 1	1365.8	(15/2$^-$)	649.35	(15/2$^-$)		
719.1[@] 2	8.2[b] 4	4254.0	(33/2$^+$)	3534.7	(29/2$^+$)		
720.8[&] 3	2.3[c] 2	1365.8	(15/2$^-$)	645.05	(13/2$^-$)	M1+E2	Mult.: from DCO(37°/79°)=0.5 1 (2002Mo20).
722.3[@] 2	12.0[b] 6	1951.90	(21/2$^-$)	1229.56	(17/2$^-$)	E2	
727.2[@] 2	13.9[b] 7	2903.2	(25/2$^+$)	2176.0	(21/2$^+$)	E2	
727.6[@] 2	6.3[b] 6	1951.90	(21/2$^-$)	1224.36	(19/2$^-$)	M1+E2	
729.2[@] 2	10.7[b] 5	3943.9	(31/2$^+$)	3214.5	(27/2$^+$)	E2	
753.7[@] 2	9.5[b] 5	4068.1	(31/2$^+$)	3314.4	(27/2$^+$)	E2	
757.3[@] 5	5.0[b] 5	4375.1	(33/2$^+$)	3618.0	(29/2$^+$)	E2	
757.5[@] 2	8.8[b] 4	4438.1	(33/2$^+$)	3680.6	(29/2$^+$)		
759.3[&] 4	1.6[c] 2	1002.7	(13/2$^-$)	243.35	(11/2$^-$)	M1+E2	Mult.: from DCO(37°/79°)=0.7 1 (2002Mo20).
769.8[&] 4	1.6[c] 1	3388.2	(27/2$^-$)	2618.4	(23/2$^-$)	E2	Mult.: from DCO(37°/79°)==0.9 2 (2002Mo20).
777.4[@] 2	10.7[b] 5	3680.6	(29/2$^+$)	2903.2	(25/2$^+$)	E2	
778[@] 1	18.3[e] 9	3314.4	(27/2$^+$)	2536.2	(23/2$^+$)	E2	
778[@] 1	18.3[e] 9	4846.3	(35/2$^+$)	4068.1	(31/2$^+$)	E2	
785.1[&] 3	4.6[c] 4	3026.5	(25/2$^-$)	2241.3	(21/2$^-$)	E2	Mult.: from DCO(37°/79°)=1.0 1 (2002Mo20).
790.6[@] 2	7.6[b] 4	4666.6	(35/2$^+$)	3876.2	(31/2$^+$)	E2	
793.9[@] 2	7.6[b] 4	5232.0	(37/2$^+$)	4438.1	(33/2$^+$)		
806[@] 1	<1.3[b]	2983.0	(25/2$^+$)	2176.0	(21/2$^+$)		
819.8[@] 2	51.7[b] 25	2752.6	(27/2$^-$)	1932.55	(23/2$^-$)	E2	
831.3[@] 2	10.0[b] 5	2782.9	(25/2$^-$)	1951.90	(21/2$^-$)	E2	
834.4[@] 5	6.3[b] 6	5680.8	(39/2$^+$)	4846.3	(35/2$^+$)	E2	
846.7[&] 3	2.1[c] 3	3873.2	(29/2$^-$)	3026.5	(25/2$^-$)	E2	Mult.: from DCO(37°/79°)==1.2 3 (2002Mo20).
849.9[@] 2	8.2[b] 4	5104.0	(37/2$^+$)	4254.0	(33/2$^+$)		
850.3[@] 5	5.0[b] 5	2782.9	(25/2$^-$)	1932.55	(23/2$^-$)	M1+E2	
853.0[@] 2	10.0[b] 5	4797.0	(35/2$^+$)	3943.9	(31/2$^+$)	E2	
854[@] 1	<1.3[b]	7630.8	(47/2$^+$)	6774.9	(43/2$^+$)		
867.3[@] 2	13.9[e] 7	5242.4	(37/2$^+$)	4375.1	(33/2$^+$)		
868.4[@] 2	13.9[e] 7	8013.9	(49/2$^+$)	7145.5	(45/2$^+$)		
876.3[@] 5	4.4[b] 4	4553.4	(33/2$^-$)	3677.1	(29/2$^-$)		
884.1[@] 5	6.3[b] 6	6116.1	(41/2$^+$)	5232.0	(37/2$^+$)		
894.4[@] 2	9.5[b] 5	3677.1	(29/2$^-$)	2782.9	(25/2$^-$)	E2	
894.9 10	2.0 4	2846.8		1951.90	(21/2$^-$)		E_γ: given as 849.7 *10* in author's table, 894.9 in drawing. The 849.7 keV may be a misprint (evaluators).

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(HI,xnγ) (continued)

γ(^{119}Xe) (continued)

E_γ[‡]	I_γ[#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[†]	Comments
903.6[@] 2	6.9[b] 3	5570.1	(39/2$^+$)	4666.6	(35/2$^+$)		
909.8[@] 2	47.3[b] 24	3662.4	(31/2$^-$)	2752.6	(27/2$^-$)	E2	
912.7[&] 3	2.6[c] 3	1562.0	(17/2$^-$)	649.35	(15/2$^-$)	M1+E2	Mult.: from DCO(37°/79°)=0.5 1 (2002Mo20).
914.3 10	5.0 6	2846.8		1932.55	(23/2$^-$)		
924.2[@] 2	4.4[b] 4	3677.1	(29/2$^-$)	2752.6	(27/2$^-$)	M1+E2	
933.8[@] 5	4.4[b] 4	6614.6	(43/2$^+$)	5680.8	(39/2$^+$)	E2	
945.2[@] 2	8.8[b] 4	7145.5	(45/2$^+$)	6200.3	(41/2$^+$)	E2	
950.0[@] 2	6.9[b] 3	6054.0	(41/2$^+$)	5104.0	(37/2$^+$)		
957.6[@] 2	16.4[e] 8	5754.7	(39/2$^+$)	4797.0	(35/2$^+$)	E2	
957.9[@] 2	16.4[e] 8	6200.3	(41/2$^+$)	5242.4	(37/2$^+$)	E2	
968[@] 1	57[e] 3	4630.4	(35/2$^-$)	3662.4	(31/2$^-$)	E2	
968[@] 1	57[e] 3	5598.4	(39/2$^-$)	4630.4	(35/2$^-$)	E2	
970.8[@] 5	5.0[b] 5	7086.9	(45/2$^+$)	6116.1	(41/2$^+$)		
987.2[@] 2	22.1[b] 11	6585.6	(43/2$^-$)	5598.4	(39/2$^-$)	E2	
994.8[@] 5	5.0[b] 5	6564.3	(43/2$^+$)	5570.1	(39/2$^+$)		
1006.1[@] 2	20.1[b] 10	7591.7	(47/2$^-$)	6585.6	(43/2$^-$)	E2	
1016[@] 1	1.9[b] 2	7630.8	(47/2$^+$)	6614.6	(43/2$^+$)		
1016.7[&] 4	1.8[c] 2	2241.3	(21/2$^-$)	1224.36	(19/2$^-$)	M1+E2	Mult.: from DCO(37°/79°)=0.6 1 (2002Mo20).
1019.7[@] 5	6.3[b] 6	6774.9	(43/2$^+$)	5754.7	(39/2$^+$)	E2	
1031.1[@] 5	5.7[b] 6	7085.1	(45/2$^+$)	6054.0	(41/2$^+$)		
1032.4[@] 5	6.3[b] 6	7618.0		6585.6	(43/2$^-$)		
1042.2[@] 5	5.7[b] 6	9056.1	(53/2$^+$)	8013.9	(49/2$^+$)		
1042.6[@] 5	2.5[b] 3	7657.2	(47/2$^+$)	6614.6	(43/2$^+$)	E2	
1066.0[@] 5	3.2[b] 3	8152.9	(49/2$^+$)	7086.9	(45/2$^+$)		
1067.0[@] 5	3.8[b] 4	7630.8	(47/2$^+$)	6564.3	(43/2$^+$)		
1075[@] 1	1.9[b] 2	7849.9	(47/2$^+$)	6774.9	(43/2$^+$)	E2	
1077.5[@] 2	18.3[b] 9	8669.2	(51/2$^-$)	7591.7	(47/2$^-$)	E2	
1094.1[&] 4	2.1[c] 2	3026.5	(25/2$^-$)	1932.55	(23/2$^-$)	M1+E2	Mult.: from DCO(37°/79°)=0.4 2 (2002Mo20).
1102.8[@] 5	5.0[b] 5	8187.9	(49/2$^+$)	7085.1	(45/2$^+$)		
1126[@] 1	5.0[e] 5	11309.1	(61/2$^+$)	10183.1	(57/2$^+$)		
1127[@] 1	5.0[e] 5	10183.1	(57/2$^+$)	9056.1	(53/2$^+$)		
1133.9[@] 5	3.2[b] 3	8764.7	(51/2$^+$)	7630.8	(47/2$^+$)		
1147.4[@] 5	1.3[b] 1	8804.6	(51/2$^+$)	7657.2	(47/2$^+$)	E2	
1158.7[@] 2	15.1[b] 8	9827.9	(55/2$^-$)	8669.2	(51/2$^-$)	E2	
1174[@f] 1	<1.3[b]	9326.9?	(53/2$^+$)	8152.9	(49/2$^+$)		
1196.8[@] 5	3.2[b] 3	9384.7	(53/2$^+$)	8187.9	(49/2$^+$)		
1226.9[@] 5	2.5[b] 3	9991.6	(55/2$^+$)	8764.7	(51/2$^+$)		
1243.1[@] 2	13.9[b] 7	11071.1	(59/2$^-$)	9827.9	(55/2$^-$)	E2	
1288[@] 1	2.5[b] 3	10672.7	(57/2$^+$)	9384.7	(53/2$^+$)		
1319.0[@] 5	2.5[b] 3	11310.6	(59/2$^+$)	9991.6	(55/2$^+$)		
1329[@] 1	12.0[b] 6	12400.1	(63/2$^-$)	11071.1	(59/2$^-$)	E2	
1370[@] 1	<1.3[b]	12042.7	(61/2$^+$)	10672.7	(57/2$^+$)		
1411[@] 1	1.3[b] 1	12721.6	(63/2$^+$)	11310.6	(59/2$^+$)		
1416[@] 1	10.7[b] 5	13816.1	(67/2$^-$)	12400.1	(63/2$^-$)		
1506.9[@] 2	10.0[b] 5	15323.0	(71/2$^-$)	13816.1	(67/2$^-$)		

Continued on next page (footnotes at end of table)

(HI,xnγ) (continued)

γ(^{119}Xe) (continued)

E_γ[‡]	I_γ[#]	E_i(level)	J_i^π	E_f	J_f^π
1611.5[@] *2*	7.6[b] *4*	16934.5	(75/2$^-$)	15323.0	(71/2$^-$)
1734.5[@] *2*	6.9[b] *3*	18669.0	(79/2$^-$)	16934.5	(75/2$^-$)
1873[@] [f] *1*	1.9[b] *2*	20542.2?	(83/2$^-$)	18669.0	(79/2$^-$)

[†] Deduced by 1998Sc48 from R-ratio and band structures; R=Iγ (79.0° or 133.6°)/Iγ(101.0° or 157.6°). Assigned E2 (*i.e.*,stretched Q interpreted as E2) if ratio is ≈1.0, and M1 (*i.e.*, stretched D as M1) if ratio is ≈0.5, except as noted.
[‡] From 1982Ba31, unless otherwise noted.
[#] At 65 MeV; relative to I(176γ)=100 (1982Ba31).
[@] From 1998Sc48.
[&] From 2002Mo20.
[a] Identified as part of a composite line (1982Ba31).
[b] From 1998Sc48. Values are normalized to Iγ(406γ)=63 *3*.
[c] From 2002Mo20. Values are normalized to Iγ(406γ)=63 *3*.
[d] From coincidence data (1982Ba31).
[e] Value given for doublet peak (1998Sc48).
[f] Placement of transition in the level scheme is uncertain.

(HI,xnγ)

Level Scheme

Intensities: Relative I_γ

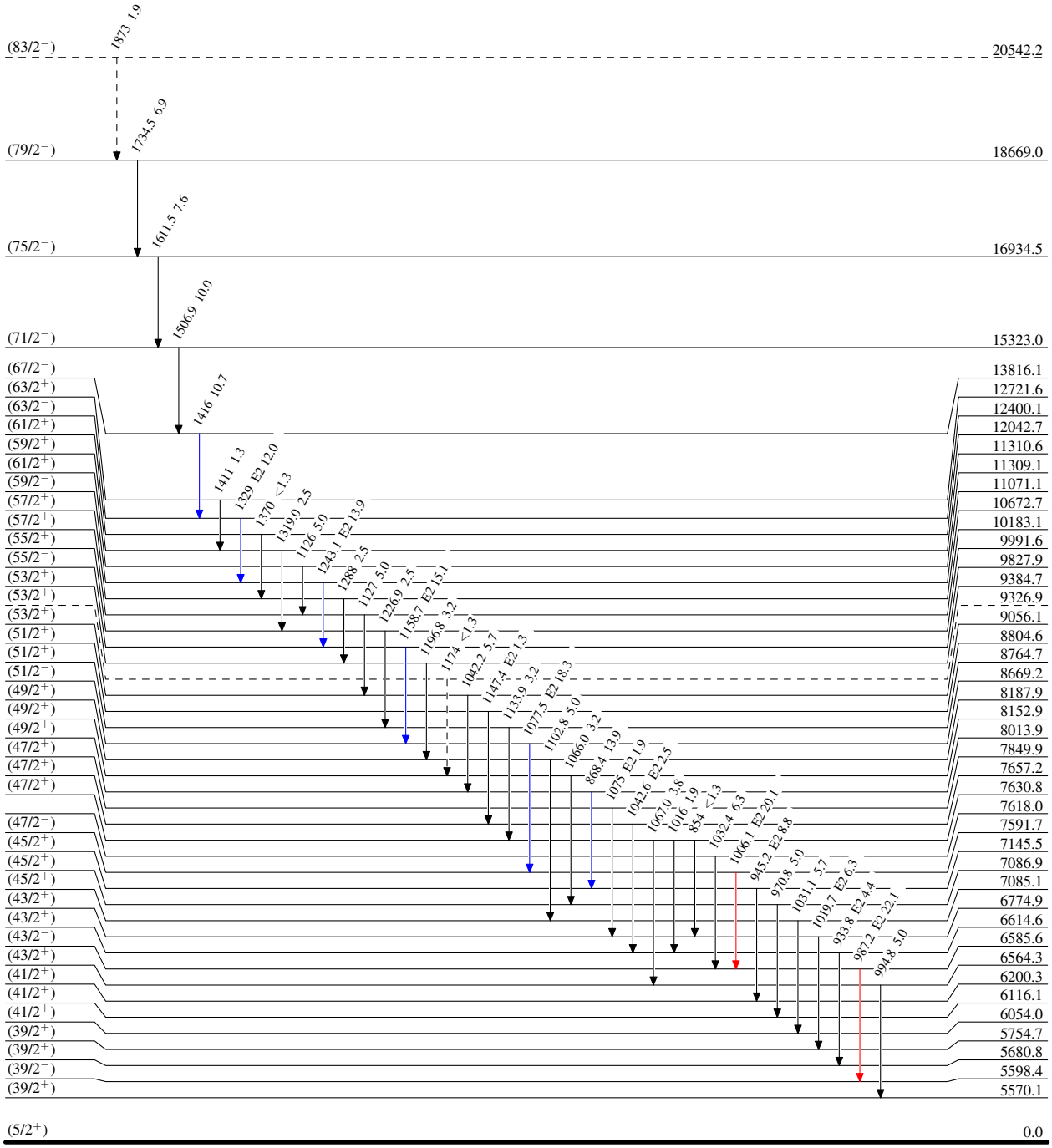
Legend

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

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

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

γ Decay (Uncertain)



$^{119}_{54}Xe_{65}$

(HI,xnγ)

Level Scheme (continued)

Intensities: Relative I_γ

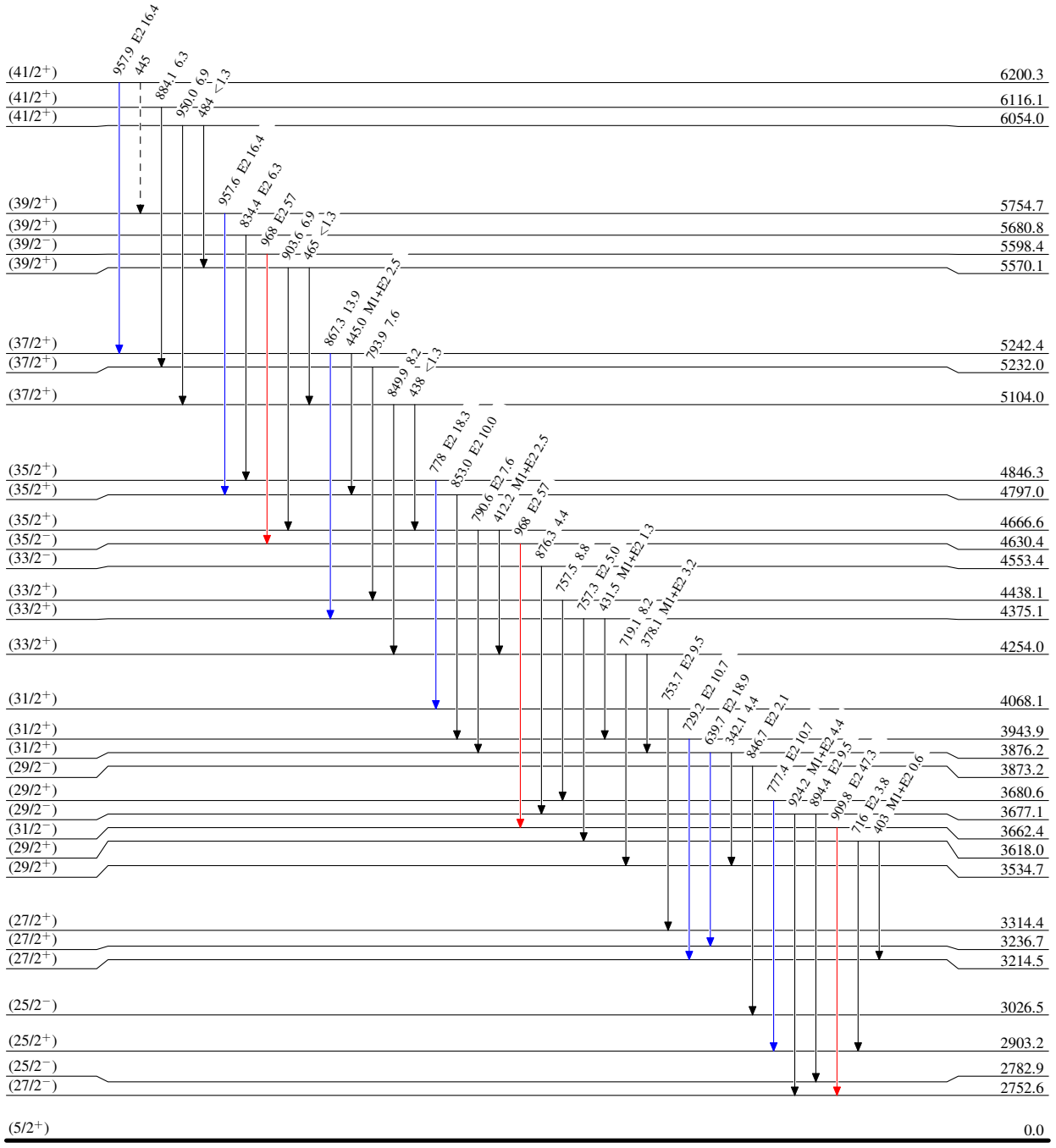
Legend

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

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

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

γ Decay (Uncertain)



$^{119}_{54}Xe_{65}$

(HI,xnγ)

Level Scheme (continued)

Intensities: Relative I_γ

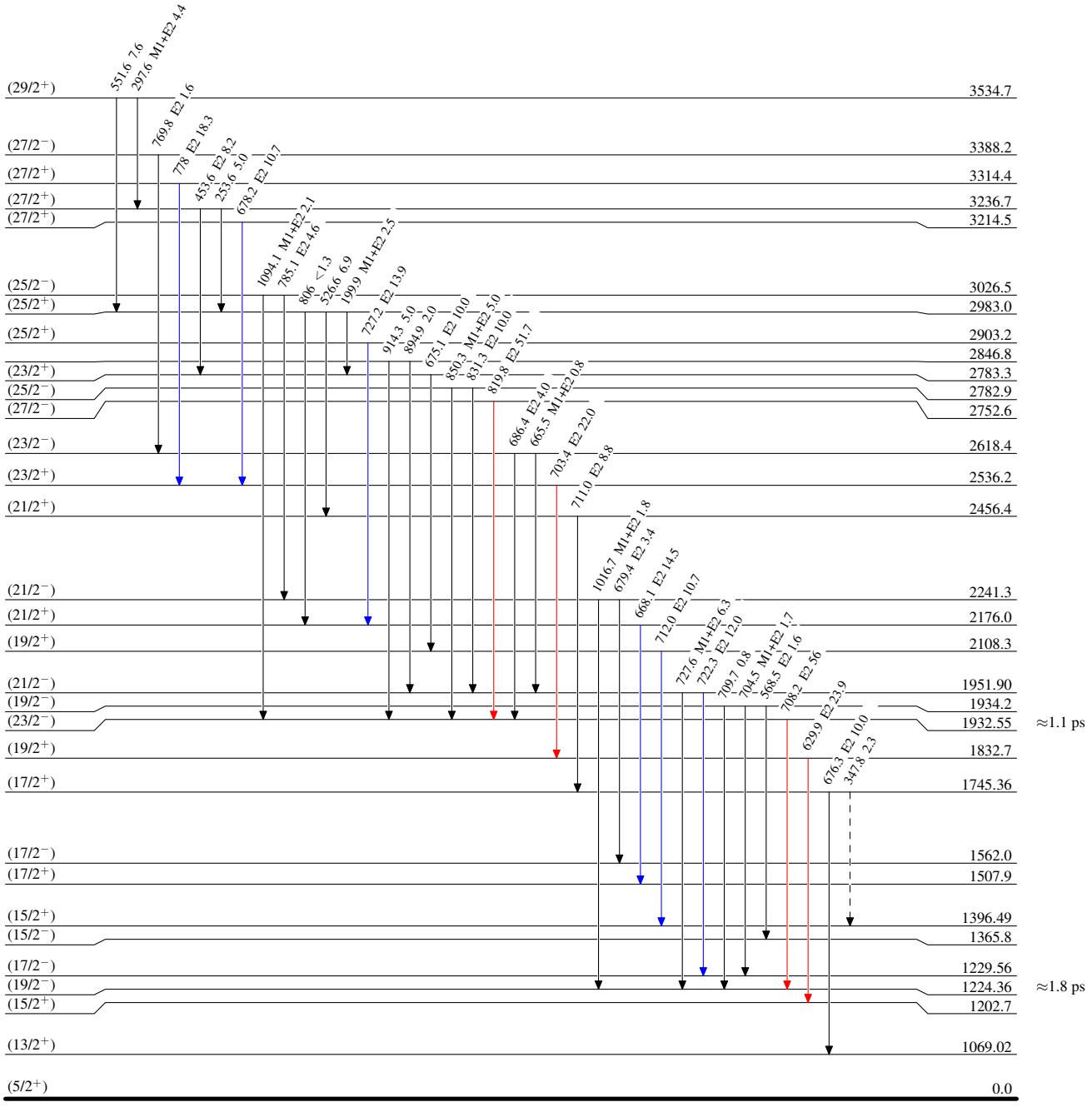
Legend

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

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

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

γ Decay (Uncertain)



$^{119}_{54}Xe_{65}$

(HI,xnγ)

Level Scheme (continued)

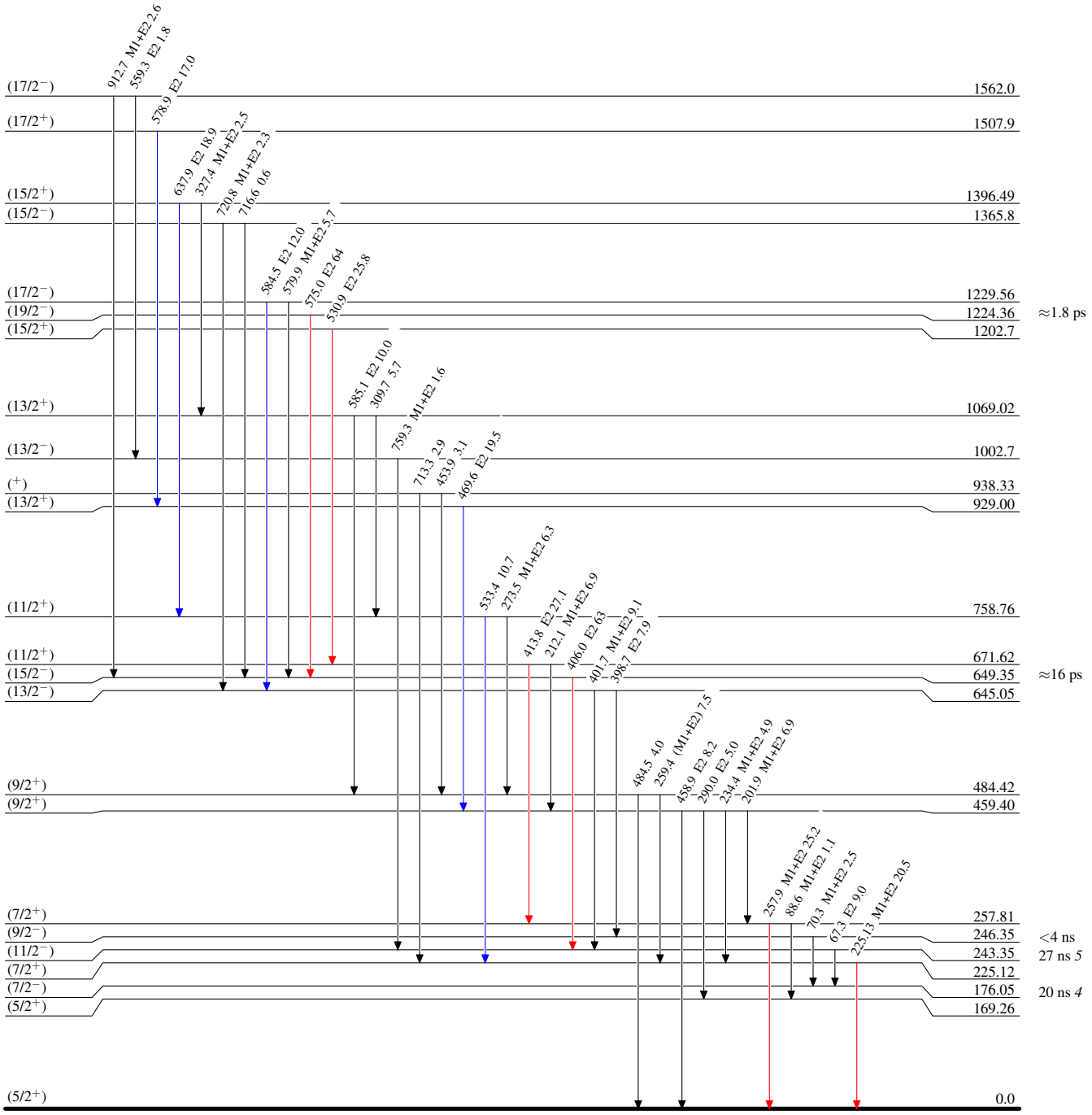
Intensities: Relative I_γ

Legend

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

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

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

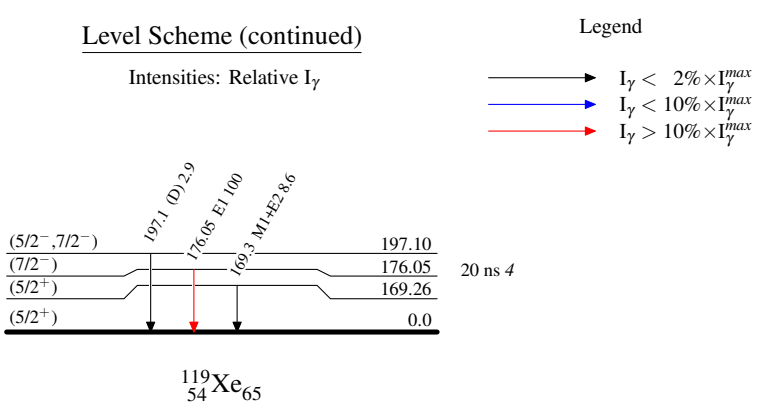


$^{119}_{54}Xe_{65}$

(HI,xnγ)

Level Scheme (continued)

Intensities: Relative I_γ



$^{119}_{54}Xe_{65}$