^{191}Ir(n,γ) E=thermal:primary 1991Ke10,1971Kr09

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

Others: 1959Ba05, 1959Kn63, 1966Wa02, 1967Do08, 1973PrZI, 1975PrZP, 1978CoZD, 1979SiZU, 1983MuZU, 1988Mu26, 2007ChZX.

Target $J^\pi=3/2^+$.

σ_n=954 *10* (2006MuZX).

All Eγ and Iγ data in this data set are from (n,γ) E=thermal, with the exception of the 6112γ (as noted). However, documentation for E=resonance (several) and E=reactor spectrum studies is also included in this data set, for completeness. See ^{191}Ir(n,γ) E=2, 24 keV data set for average resonance capture data.

1971Kr09 (E=thermal): measured Eγ, Iγ (Ge(Li)-scin pair spect).

1983MuZU (E=resonance: avg): measured averaged intensities of primary γ′s (Ge(Li)); determined J^π for low-lying states.

1988Mu26 (E=reactor spectrum, filtered beam): measured Eγ, Iγ (Ge(Li)-NaI-NaI 3-crystal pair spect).

1991Ke10 (E=thermal): natural Ir, 86% ^{191}Ir and 98.1% ^{193}Ir targets, pair spectrometer (Eγ calibration based on ^{14}N(n,γ)); measured Eγ, Iγ.

2007ChZX (supersedes 2003ChZS): evaluation of thermal neutron capture data. includes new measurements (referred to In this evaluation As ‘Budapest Data′): ^{nat}IR target; thermal neutrons from Budapest reactor; Ge(Li); measured Eγ, Iγ for strongest primary and secondary transitions; reported elemental photon cross sections.

The level scheme and all data are from 1991Ke10, unless noted otherwise. 1988Mu26 proposed an alternative level scheme (not adopted), with capture state at 6169 keV and $J^\pi=4^-$ for ground state.

^{192}Ir Levels

E(level)‡	Jπ†	E(level)‡	Jπ†	E(level)‡	Jπ†
0.0	4⁺	508.81 *16*	(2,3)⁻	865.58 *23*	0⁻ to 3⁻
56.9# *8*	1⁻	516.5 *7*	1⁻,2⁻,3⁻	870.49 *21*	
67.9? *15*	(4)⁻	530.23 *16*	1⁻,2⁻,3⁻	884.5 *6*	1⁻,2⁻,3⁻
86.0 *10*	3⁻	536.89 *23*		893.57 *18*	
104.69 *24*	(1)⁻	543.65 *21*	0⁻ to 3⁻	907 *4*	1⁻,2⁻,3⁻
116.01 *18*	(2)⁻	560.5 *7*		914.5 *4*	
119.5 *12*	3⁻	585.5 *3*		937.4 *6*	0⁻ to 3⁻
130.8 *11*		602.27 *17*	0⁻ to 3⁻	944.3 *4*	
142.9 *5*	(1)⁻	612.9 *8*	0⁻ to 3⁻	950.1 *5*	
173.2 *12*		628.9 *4*	1⁻,2⁻,3⁻	963.0 *18*	
193.26@ *24*	(2)⁻&(1)⁺	633.36 *17*		978.28 *21*	
203.5 *11*	≤3	645.8 *3*	0⁻ to 3⁻	999.6 *3*	
212.5 *10*	(1,2)⁻	657.8 *13*		1003.6 *3*	
226.01 *24*	(2)⁻&(≤2⁻)	663.31 *17*		1013.7 *4*	0⁻ to 3⁻
235.78 *23*	(1⁻)	681.3 *5*	1⁻,2⁻,3⁻	1019? *4*	1⁻,2⁻,3⁻
239.94 *23*	(2)⁻	702.8 *3*	0⁻ to 3⁻	1031.09 *16*	
287.8 *6*	(2)⁻	707.9 *9*		1044.7 *3*	
292.15 *24*	(2)⁻	714.1 *7*	0⁻ to 3⁻	1050.55 *15*	1⁻,2⁻,3⁻
317.3 *7*	(2)⁻	734.3 *6*		1060.11 *20*	
331.27@ *19*	(2)⁻&(1)⁻	739.09 *22*	1⁻,2⁻,3⁻	1068.9 *3*	
351.6 *10*	(2)⁺	749.5 *3*		1074.7 *3*	
368.0@ *5*	(2)⁻&(2)⁻	766.69 *17*	1⁻,2⁻,3⁻	1088.5 *10*	
380.3 *7*		777.4 *3*	0⁻ to 3⁻	1093.8 *4*	
389.76@ *22*	(2)⁻&(1,2,3)⁻	788.2 *10*		1107.0 *3*	
415.19 *16*	1⁻,2⁻,3⁻	797.1 *5*		1112.6 *5*	
439.8 *3*	1⁻,2⁻,3⁻	813.19 *23*	1⁻,2⁻,3⁻	1131.9 *4*	
451.2 *3*	(1,2)⁻	821.84 *20*		1145.01 *24*	
470.8 *5*	1⁻,2⁻,3⁻	841.0 *3*	0⁻ to 3⁻	1151.7 *11*	
489.7 *5*	1⁻,2⁻,3⁻	850.9 *4*	0⁻ to 3⁻	1155.9 *4*	

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^{191}Ir(n,γ) E=thermal:primary 1991Ke10,1971Kr09 (continued)

^{192}Ir Levels (continued)

E(level)‡
1160.8 *4*
1169.5 *4*
1177.40 *19*
1194.4 *3*
1204.8 *4*
1212.14 *18*
1217.63 *17*
1225.82 *21*
1231.3 *3*
1242.9 *5*
1248.4 *3*
1255.34 *22*
1259.2 *6*
1265.3 *6*
1273.6 *15*
1282.6 *7*
1291.1 *8*
1299.4 *6*
1304.4 *3*
1323.0 *5*
1331.05 *17*
1338.7 *3*
1343.4 *10*
1348.4 *6*
1359.9 *8*
1365.9 *9*
1372.1 *8*
1381.0 *3*
1388.49 *23*
1396.5 *6*
1409.1 *10*
1418.23 *19*
1432.5 *6*
1436.7 *10*
1441.8 *10*
1448.1 *4*
1464.0 *5*
1468.5 *5*
1486.7 *6*
1495.3 *10*
1502.5 *10*
1514.5 *8*
1530.04 *20*
1534.6 *3*
1551.54 *13*
1558.1 *10*
1571.9 *5*
1586.7 *10*
1597.0 *10*
1608.3 *6*
1626.2 *6*
1634.8 *14*
1641.5 *13*
1648.5 *9*
1659.0 *7*
1666.69 *22*
1676.8 *7*

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^{191}Ir(n,γ) E=thermal:primary 1991Ke10,1971Kr09 (continued)

^{192}Ir Levels (continued)

E(level)[‡]	J$^{\pi}$[†]	Comments
1692.4 *7*		
1703.0 *7*		
(6198.13[&] *11*)	1^{+},2^{+}[a]	Additional information 1.

[†] From Adopted Levels. Additionally, with J$^{\pi}$=1^{+},2^{+} for thermal n capture state(s), J=0,1,2,3 for levels which have significant feeding by primary γ′s in (n,γ) E=thermal.
[‡] Deduced from least-squares fit to Eγ for primary γ′s (the highest energy γ (Eγ=6141.1 keV *8*) is assumed to populate the 57 level), assuming E=S(n) from 2011AuZZ for the capture state(S).
[#] Adopted value.
[@] Probable doublet (see Adopted Levels, Gammas), with J$^{\pi}$ components indicated.
[&] Neutron separation energy from 2011AuZZ.
[a] s-wave capture by 3/2^{+} target.

γ(^{192}Ir)

Iγ normalization: From I(6079γ+6082γ+6093γ)=0.91 per 100 captures if σ_n=924 *53* (1971Kr09), revised by evaluator assuming σ_n=954 *10* (2006MuZX). With this normalization, I(6082γ+6093γ)=0.80 *4* cf. 0.89 *3* from 2007ChZX (Budapest data) and Σ Iγ(primary)≈15%; the normalized Iγ data from 1991Ke10 are In satisfactory agreement with those from 2007ChZX (Budapest Data) In the majority of cases (exceptions are noted).

Eγ[†]	Iγ[‡c]	E$_i$(level)	J$^{\pi}_i$	E$_f$	Comments
4495.1[b] *7*	9.1[b] *15*	(6198.13)	1^{+},2^{+}	1703.0	other Eγ (Iγ): 4496.03 *22* (16.4 *16*) (2007ChZX; Budapest Data).
4505.7[b] *7*	9.1[b] *15*	(6198.13)	1^{+},2^{+}	1692.4	
4521.3[#b] *7*	7.6[#b] *15*	(6198.13)	1^{+},2^{+}	1676.8	other Eγ (Iγ): 4520.6 *6* (4.5 *15*) (2007ChZX; Budapest Data).
4531.38[#&] *22*	27[#b] *5*	(6198.13)	1^{+},2^{+}	1666.69	
4539.1[#b] *7*	12[#b] *3*	(6198.13)	1^{+},2^{+}	1659.0	other Eγ (Iγ): 4540.4 *8* (2.2 *11*) (2007ChZX; Budapest Data).
4549.6[#b] *9*	8[#b] *3*	(6198.13)	1^{+},2^{+}	1648.5	other Eγ (Iγ): 4549.5 *8* (2.2 *11*) (2007ChZX; Budapest Data).
4556.6[#b] *13*	8[#b] *3*	(6198.13)	1^{+},2^{+}	1641.5	
4563.3[#b] *14*	6[#b] *5*	(6198.13)	1^{+},2^{+}	1634.8	
4571.9[b] *6*	20[b] *3*	(6198.13)	1^{+},2^{+}	1626.2	other Eγ (Iγ): 4569.9 *4* (8.6 *15*) (2007ChZX; Budapest Data).
4589.8[b] *6*	23[b] *5*	(6198.13)	1^{+},2^{+}	1608.3	other Eγ (Iγ): 4591.35 *16* (21.3 *17*) (2007ChZX; Budapest Data).
4601.1[b] *10*	5[b] *3*	(6198.13)	1^{+},2^{+}	1597.0	
4611.4[b] *10*	5[b] *3*	(6198.13)	1^{+},2^{+}	1586.7	
4626.2[&] *5*	6.1[b] *15*	(6198.13)	1^{+},2^{+}	1571.9	
4640.0 *10*	6.8 *25*	(6198.13)	1^{+},2^{+}	1558.1	
4646.53[&] *13*	10.6 *21*	(6198.13)	1^{+},2^{+}	1551.54	
4663.5[&] *3*	10 *3*	(6198.13)	1^{+},2^{+}	1534.6	
4668.03[&] *20*	14 *4*	(6198.13)	1^{+},2^{+}	1530.04	
4683.6 *8*	3.8 *24*	(6198.13)	1^{+},2^{+}	1514.5	
4695.6[b] *10*	3.0[b] *15*	(6198.13)	1^{+},2^{+}	1502.5	
4702.8[b] *10*	3.0[b] *15*	(6198.13)	1^{+},2^{+}	1495.3	
4711.4[b] *6*	7.6[b] *15*	(6198.13)	1^{+},2^{+}	1486.7	
4729.6[&] *5*	5.8 *26*	(6198.13)	1^{+},2^{+}	1468.5	
4734.1 *5*	20 *4*	(6198.13)	1^{+},2^{+}	1464.0	

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^{191}Ir(n,γ) E=thermal:primary 1991Ke10,1971Kr09 (continued)

γ(^{192}Ir) (continued)

E_γ[†]	I_γ[‡c]	E_i(level)	J^π_i	E_f	J^π_f	Comments
4750.0 *4*	14 *3*	(6198.13)	1+,2+	1448.1		
4756.3 *10*	3.5 *23*	(6198.13)	1+,2+	1441.8		other Eγ (Iγ): 4755.2 *19* (14.6 *12*) (2007ChZX; Budapest Data).
4761.4 *10*	4.4 *24*	(6198.13)	1+,2+	1436.7		
4765.6 *6*	16 *3*	(6198.13)	1+,2+	1432.5		other Eγ (Iγ): 4765.7 *19* (9.1 *10*) (2007ChZX; Budapest Data).
4779.84 *19*	18.9 *21*	(6198.13)	1+,2+	1418.23		E_γ: from (2007ChZX; Budapest Data) where Iγ=11.9 *12*.
4789.0 *10*	4.8 *25*	(6198.13)	1+,2+	1409.1		
4801.6 *6*	6.0 *13*	(6198.13)	1+,2+	1396.5		
4809.58[&] *23*	17.4 *22*	(6198.13)	1+,2+	1388.49		
4817.1[&] *3*	10 *3*	(6198.13)	1+,2+	1381.0		
4826.0 *8*	5.1 *15*	(6198.13)	1+,2+	1372.1		
4832.2 *9*	4.5 *15*	(6198.13)	1+,2+	1365.9		
4838.2 *8*	7.0 *18*	(6198.13)	1+,2+	1359.9		
4849.7 *6*	9 *3*	(6198.13)	1+,2+	1348.4		
4854.7 *10*	12.7 *23*	(6198.13)	1+,2+	1343.4		
4859.32 *25*	24 *3*	(6198.13)	1+,2+	1338.7		
4867.01[&] *17*	32 *3*	(6198.13)	1+,2+	1331.05		
4875.1 *5*	16 *3*	(6198.13)	1+,2+	1323.0		
4893.7[&] *3*	15 *4*	(6198.13)	1+,2+	1304.4		
4898.7 *6*	18 *4*	(6198.13)	1+,2+	1299.4		
4907.0[b] *8*	4.5[b] *15*	(6198.13)	1+,2+	1291.1		
4915.5[b] *7*	27[b] *6*	(6198.13)	1+,2+	1282.6		other Eγ (Iγ): 4916.8 *3* (10.8 *19*) (2007ChZX; Budapest Data).
4924.5[b] *15*	5[b] *3*	(6198.13)	1+,2+	1273.6		other Eγ (Iγ): 4927.4 *8* (2.2 *11*) (2007ChZX; Budapest Data).
4932.8 *6*	10.6 *26*	(6198.13)	1+,2+	1265.3		other Eγ (Iγ): 4932.9 *6* (4.1 *15*) (2007ChZX; Budapest Data).
4938.9 *6*	11 *4*	(6198.13)	1+,2+	1259.2		
4942.72 *22*	19 *5*	(6198.13)	1+,2+	1255.34		
4949.7[&] *3*	11 *4*	(6198.13)	1+,2+	1248.4		
4955.2 *5*	7 *3*	(6198.13)	1+,2+	1242.9		
4966.8[&] *3*	6 *3*	(6198.13)	1+,2+	1231.3		
4972.24[&] *21*	11.2 *19*	(6198.13)	1+,2+	1225.82		
4980.43 *17*	27 *3*	(6198.13)	1+,2+	1217.63		E_γ: from (2007ChZX; Budapest Data) where Iγ=30.6 *19*.
4985.92 *18*	25 *3*	(6198.13)	1+,2+	1212.14		E_γ: from (2007ChZX; Budapest Data) where Iγ=21.6 *14*.
4993.3 *4*	12.6 *20*	(6198.13)	1+,2+	1204.8		
5003.7[&] *3*	15.8 *22*	(6198.13)	1+,2+	1194.4		
5020.66 *19*	21 *3*	(6198.13)	1+,2+	1177.40		E_γ: from (2007ChZX; Budapest Data) where Iγ=24.6 *24*.
5028.6 *4*	11 *3*	(6198.13)	1+,2+	1169.5		other Eγ (Iγ): 5028.44 *18* (25.0 *24*) (2007ChZX; Budapest Data).
5037.3[&] *4*	7 *3*	(6198.13)	1+,2+	1160.8		
5042.2 *4*	26 *5*	(6198.13)	1+,2+	1155.9		
5046.4 *11*	5.5 *15*	(6198.13)	1+,2+	1151.7		
5053.05[&] *24*	9.2 *24*	(6198.13)	1+,2+	1145.01		
5066.2[&] *4*	4.4 *16*	(6198.13)	1+,2+	1131.9		
5085.5 *5*	10.2 *24*	(6198.13)	1+,2+	1112.6		
5091.1 *3*	16.5 *17*	(6198.13)	1+,2+	1107.0		
5104.3 *4*	4.8 *18*	(6198.13)	1+,2+	1093.8		
5109.6 *10*	5 *3*	(6198.13)	1+,2+	1088.5		
5123.4 *3*	5 *3*	(6198.13)	1+,2+	1074.7		
5129.2 *3*	29 *3*	(6198.13)	1+,2+	1068.9		other Eγ (Iγ): 5129.2 *16* (33.6 *22*) (2007ChZX; Budapest Data).
5137.95[&] *20*	15.5 *20*	(6198.13)	1+,2+	1060.11		

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^{191}Ir(n,γ) E=thermal:primary 1991Ke10,1971Kr09 (continued)

γ(^{192}Ir) (continued)

Eγ[†]	Iγ[‡c]	E_i(level)	J^π_i	E_f	J^π_f	Comments
5147.51[&] *15*	52 *5*	(6198.13)	1⁺,2⁺	1050.55	1⁻,2⁻,3⁻	
5153.4[&] *3*	9 *3*	(6198.13)	1⁺,2⁺	1044.7		
5166.97 *16*	41 *4*	(6198.13)	1⁺,2⁺	1031.09		
5178[#bd] *4*	3[#b] *6*	(6198.13)	1⁺,2⁺	1019?	1⁻,2⁻,3⁻	
5184.4 *4*	9.0 *26*	(6198.13)	1⁺,2⁺	1013.7	0⁻ to 3⁻	
5194.5[&] *3*	16 *4*	(6198.13)	1⁺,2⁺	1003.6		
5198.5[&] *3*	17 *4*	(6198.13)	1⁺,2⁺	999.6		
5219.77[&] *21*	27 *5*	(6198.13)	1⁺,2⁺	978.28		
5235.1[b] *18*	1.5[b] *15*	(6198.13)	1⁺,2⁺	963.0		
5248.0 *5*	5 *3*	(6198.13)	1⁺,2⁺	950.1		
5253.8[&] *4*	5 *3*	(6198.13)	1⁺,2⁺	944.3		
5260.7 *6*	10.1 *22*	(6198.13)	1⁺,2⁺	937.4	0⁻ to 3⁻	other Eγ (Iγ): 5261.33 *20* (19.0 *17*) (2007ChZX; Budapest Data).
5283.6 *4*	33 *5*	(6198.13)	1⁺,2⁺	914.5		
5291[b] *4*	3[b] *6*	(6198.13)	1⁺,2⁺	907	1⁻,2⁻,3⁻	
5304.48[&] *18*	32 *3*	(6198.13)	1⁺,2⁺	893.57		
5313.6 *6*	7 *4*	(6198.13)	1⁺,2⁺	884.5	1⁻,2⁻,3⁻	
5327.56[&] *21*	29 *6*	(6198.13)	1⁺,2⁺	870.49		
5332.47[&] *23*	20 *4*	(6198.13)	1⁺,2⁺	865.58	0⁻ to 3⁻	
5347.2[&] *4*	8 *3*	(6198.13)	1⁺,2⁺	850.9	0⁻ to 3⁻	
5357.0 *3*	32 *5*	(6198.13)	1⁺,2⁺	841.0	0⁻ to 3⁻	other Eγ (Iγ): 5357.49 *17* (38 *3*) (2007ChZX; Budapest Data).
5376.21[&] *20*	13.4 *16*	(6198.13)	1⁺,2⁺	821.84		
5384.86 *23*	12.6 *14*	(6198.13)	1⁺,2⁺	813.19	1⁻,2⁻,3⁻	E_γ: from (2007ChZX; Budapest Data) where Iγ=8.4 *9*.
5400.9 *5*	13.8 *16*	(6198.13)	1⁺,2⁺	797.1		other Eγ (Iγ): 5400.7 *18* (14.9 *12*) (2007ChZX; Budapest Data).
5409.8[b] *10*	1[b] *3*	(6198.13)	1⁺,2⁺	788.2		
5420.6[&] *3*	8 *3*	(6198.13)	1⁺,2⁺	777.4	0⁻ to 3⁻	
5431.36[&] *17*	38 *3*	(6198.13)	1⁺,2⁺	766.69	1⁻,2⁻,3⁻	
5448.5 *3*	21.7 *23*	(6198.13)	1⁺,2⁺	749.5		
5458.96[&] *22*	21 *4*	(6198.13)	1⁺,2⁺	739.09	1⁻,2⁻,3⁻	
5463.7 *6*	18 *5*	(6198.13)	1⁺,2⁺	734.3		E_γ: from (2007ChZX; Budapest Data) where Iγ=11.6 *26*.
5483.9 *7*	7.6 *26*	(6198.13)	1⁺,2⁺	714.1	0⁻ to 3⁻	
5490.1 *9*	8.3 *10*	(6198.13)	1⁺,2⁺	707.9		
5495.2[&] *3*	8 *3*	(6198.13)	1⁺,2⁺	702.8	0⁻ to 3⁻	
5516.7 *5*	24.2 *25*	(6198.13)	1⁺,2⁺	681.3	1⁻,2⁻,3⁻	other Eγ (Iγ): 5517.18 *19* (28.4 *18*) (2007ChZX; Budapest Data).
5534.73[&] *17*	59 *5*	(6198.13)	1⁺,2⁺	663.31		
5540.2 *13*	2.0 *18*	(6198.13)	1⁺,2⁺	657.8		
5552.2[&] *3*	9.0 *24*	(6198.13)	1⁺,2⁺	645.8	0⁻ to 3⁻	
5564.68 *17*	55 *5*	(6198.13)	1⁺,2⁺	633.36		E_γ: from (2007ChZX; Budapest Data) where Iγ=64 *4*.
5569.1 *4*	18 *4*	(6198.13)	1⁺,2⁺	628.9	1⁻,2⁻,3⁻	other Eγ (Iγ): 5570.03 *22* (25.0 *18*) (2007ChZX; Budapest Data).
5585.1[b] *8*	4.5[b] *15*	(6198.13)	1⁺,2⁺	612.9	0⁻ to 3⁻	
5595.77[&] *17*	28.0 *23*	(6198.13)	1⁺,2⁺	602.27	0⁻ to 3⁻	
5612.5 *3*	44 *4*	(6198.13)	1⁺,2⁺	585.5		
5637.5 *7*	3.6 *18*	(6198.13)	1⁺,2⁺	560.5		
5654.39 *21*	22 *3*	(6198.13)	1⁺,2⁺	543.65	0⁻ to 3⁻	E_γ: from (2007ChZX; Budapest Data) where Iγ=14.6 *12*.
5661.15[&] *23*	16.0 *24*	(6198.13)	1⁺,2⁺	536.89		
5667.81[&] *16*	100.0	(6198.13)	1⁺,2⁺	530.23	1⁻,2⁻,3⁻	

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^{191}Ir(n,γ) E=thermal:primary 1991Ke10,1971Kr09 (continued)

γ(^{192}Ir) (continued)

Eγ[†]	Iγ[‡c]	Ei(level)	J^π_i	Ef	J^π_f	Comments
5681.5 *7*	6.9 *17*	(6198.13)	1+,2+	516.5	1−,2−,3−	
5689.23[&] *16*	65 *5*	(6198.13)	1+,2+	508.81	(2,3)−	
5708.3 *5*	5.8 *16*	(6198.13)	1+,2+	489.7	1−,2−,3−	
5727.2 *5*	12.1 *15*	(6198.13)	1+,2+	470.8	1−,2−,3−	
5746.81[&] *25*	8.8 *21*	(6198.13)	1+,2+	451.2	(1,2)−	
5758.2 *3*	21.8 *20*	(6198.13)	1+,2+	439.8	1−,2−,3−	
5782.85[&] *16*	58 *7*	(6198.13)	1+,2+	415.19	1−,2−,3−	
5808.28[&] *22*	21 *5*	(6198.13)	1+,2+	389.76	(2)−&(1,2,3)−	
5817.7 *7*	5.1 *12*	(6198.13)	1+,2+	380.3		
5830.0 *5*	7.2 *21*	(6198.13)	1+,2+	368.0	(2)−&(2)−	
5846.4 *10*	3.4 *16*	(6198.13)	1+,2+	351.6	(2)+	other Eγ (Iγ): 5845.9 *6* (1.7 *5*) (2007ChZX; Budapest Data).
5866.76[&] *19*	32.2 *23*	(6198.13)	1+,2+	331.27	(2)−&(1)−	
5880.7 *7*	2.6 *10*	(6198.13)	1+,2+	317.3	(2)−	
5905.88[&] *24*	15 *4*	(6198.13)	1+,2+	292.15	(2)−	
5910.2 *6*	17 *4*	(6198.13)	1+,2+	287.8	(2)−	other Eγ (Iγ): 5910.9 *4* (8.6 *12*) (2007ChZX; Budapest Data).
[x]≈5925[@]						
5958.09[&] *23*	74 *8*	(6198.13)	1+,2+	239.94	(2)−	
5962.25[&] *23*	28 *5*	(6198.13)	1+,2+	235.78	(1−)	
5972.02[&] *24*	10.5 *20*	(6198.13)	1+,2+	226.01	(2)−&(≤2−)	
5985.5 *10*	4.1 *12*	(6198.13)	1+,2+	212.5	(1,2)−	
5994.5[b] *11*	2.3[b] *15*	(6198.13)	1+,2+	203.5	≤3	
6004.77[&] *24*	10.8 *18*	(6198.13)	1+,2+	193.26	(2)−&(1)+	
[x]≈6019[@]						
6024.8 *12*	2.4 *12*	(6198.13)	1+,2+	173.2		
6055.1 *5*	2.4 *10*	(6198.13)	1+,2+	142.9	(1)−	
6067.2 *11*	2.3 *12*	(6198.13)	1+,2+	130.8		
6078.5 *12*	13 *4*	(6198.13)	1+,2+	119.5	3−	
6082.02[&] *18*	99 *7*	(6198.13)	1+,2+	116.01	(2)−	
6093.34[&] *24*	25.8 *20*	(6198.13)	1+,2+	104.69	(1)−	
6112[a]		(6198.13)	1+,2+	86.0	3−	
6130.1[bd] *15*	1.5[b] *15*	(6198.13)	1+,2+	67.9?	(4)−	implied multipolarity of M2 or higher makes placement highly unlikely.
6141.1 *8*	5.0 *10*	(6198.13)	1+,2+	56.9	1−	other Eγ (Iγ): 6141.5 *3* (2.7 *3*) (2007ChZX; Budapest Data).

[†] From 1991Ke10, unless noted otherwise.
[‡] Relative values from 1991Ke10 for E=thermal, normalized so Iγ(5668.6γ)=100.0, except as noted. See comment with normalization to obtain absolute intensities. note also that uncertainties In Iγ quoted from 2007ChZX include the 3.7% uncertainty In I(5668γ) (the reference line) combined In quadrature with the statistical uncertainty from 2007ChZX for the γ In question.
[#] Numerically resolved from overlapping peaks.
[@] Observed in epithermal capture (1971Kr09); because of poor energy precision, transition was not used to establish a corresponding level.
[&] From Budapest Data from 2007ChZX. Transition's intensity is consistent with that from 1991Ke10 and Eγ is consistent with datum from 1991Ke10 but of higher precision.
[a] From 1988Mu26.

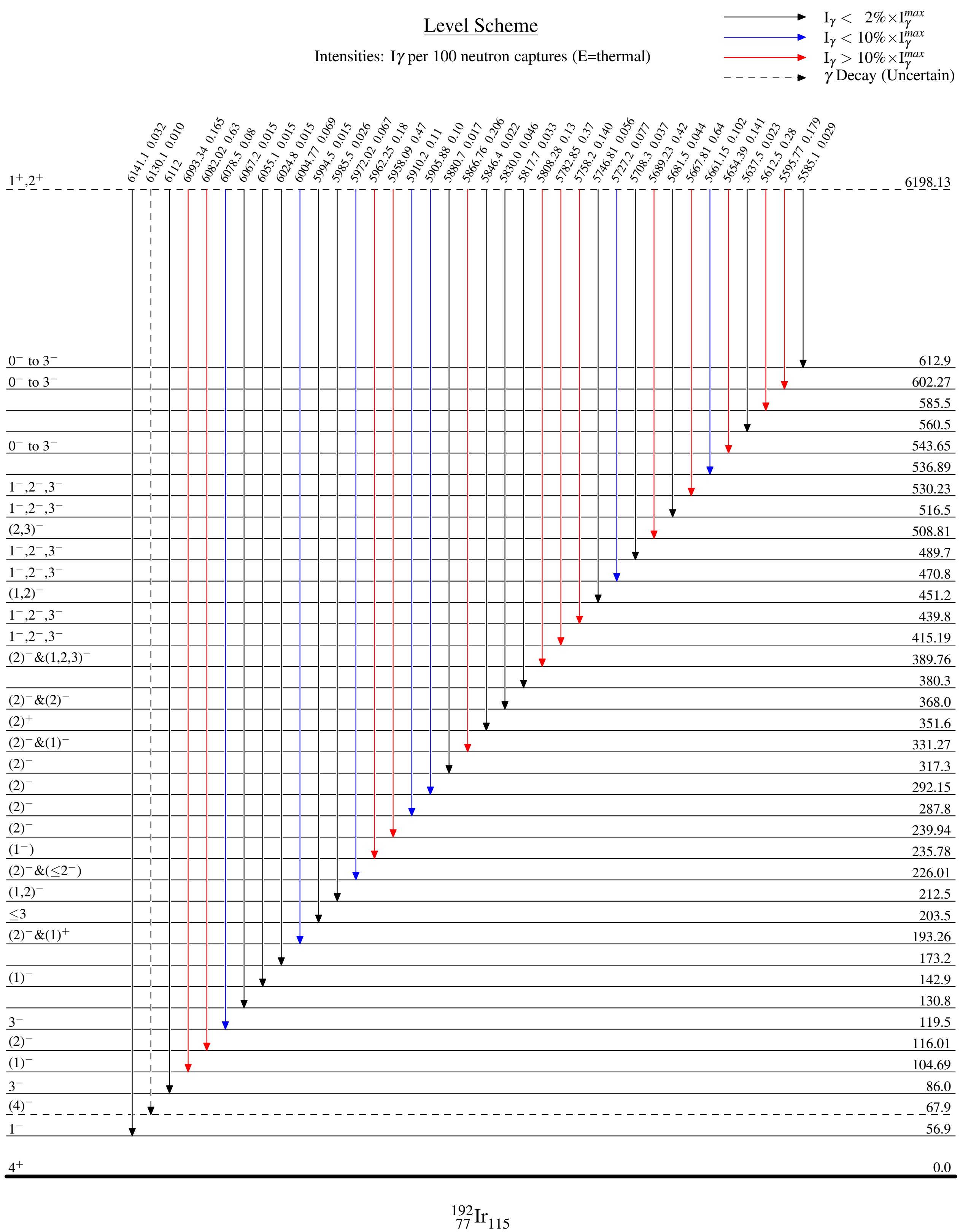
Continued on next page (footnotes at end of table)

^{191}Ir(n,γ) E=thermal:primary 1991Ke10,1971Kr09 (continued)

γ(^{192}Ir) (continued)

[b] From 1971Kr09. Intensities have been scaled so that I(6092γ+6081γ) in 1971Kr09 is the same as I(6093γ+6082γ+6079γ) in 1991Ke10.
[c] For intensity per 100 neutron captures, multiply by 0.0064.
[d] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.

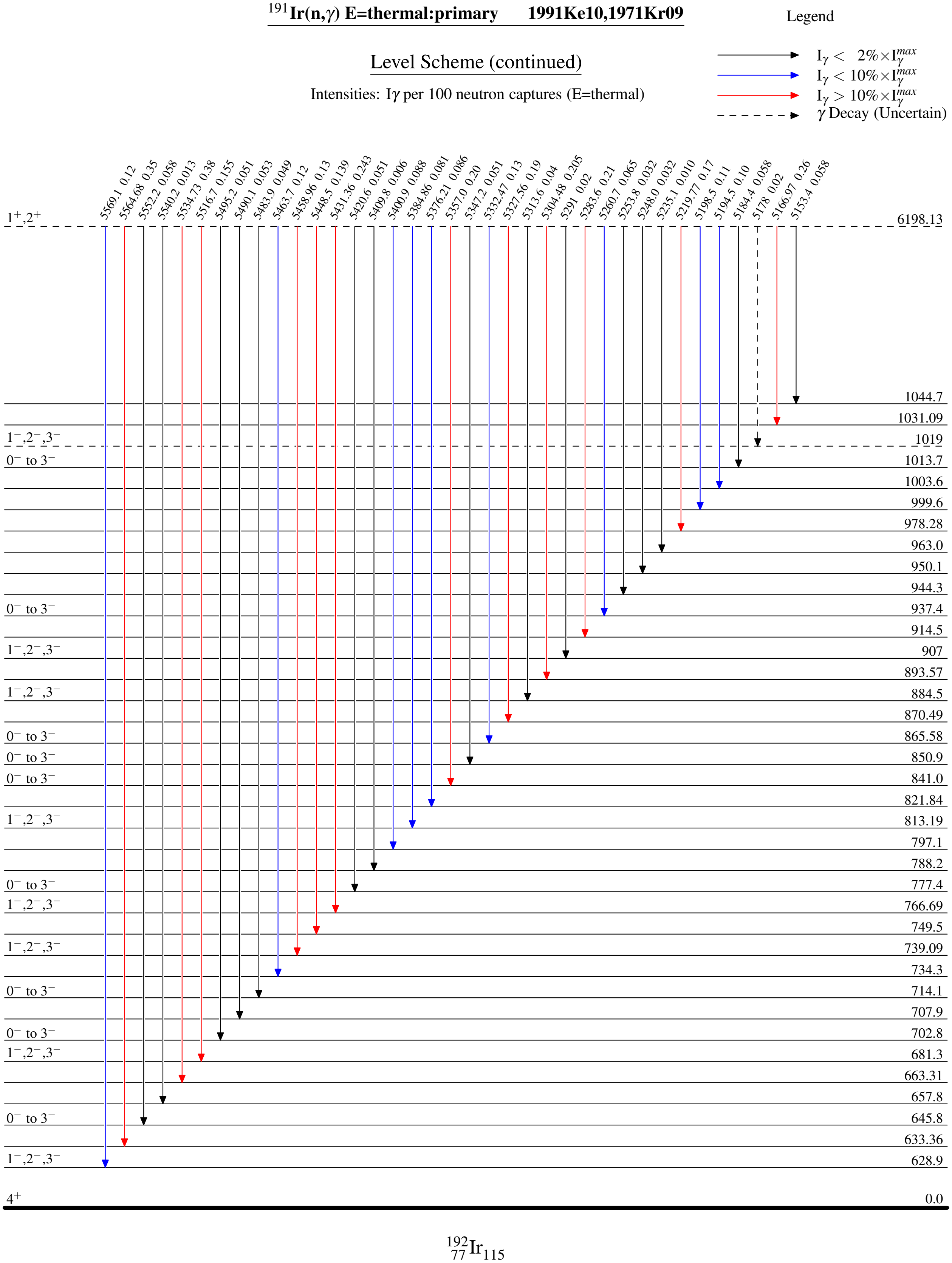
^{191}Ir(n,γ) E=thermal:primary 1991Ke10,1971Kr09



^{191}Ir(n,γ) E=thermal:primary 1991Ke10,1971Kr09

Level Scheme (continued)

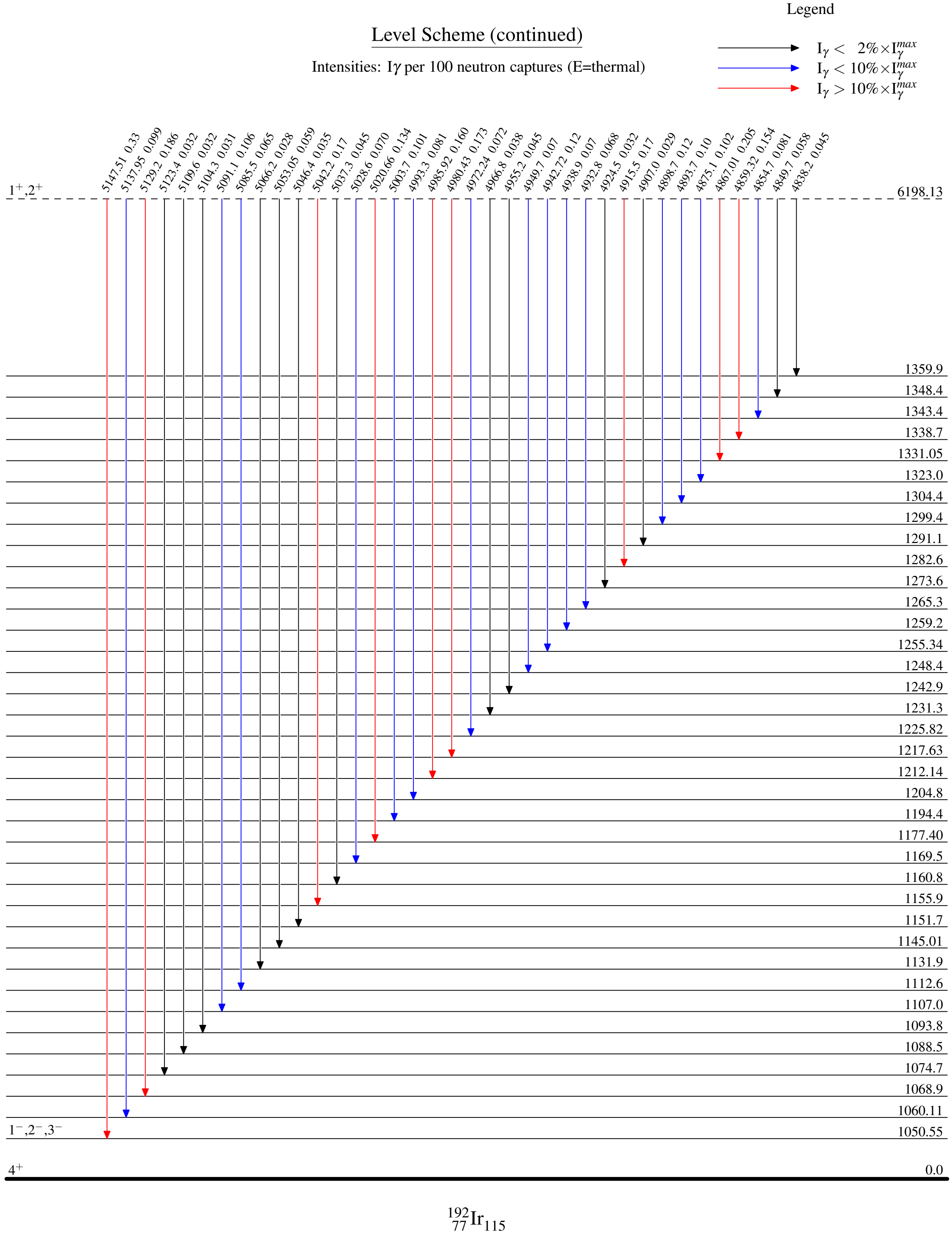
Intensities: Iγ per 100 neutron captures (E=thermal)

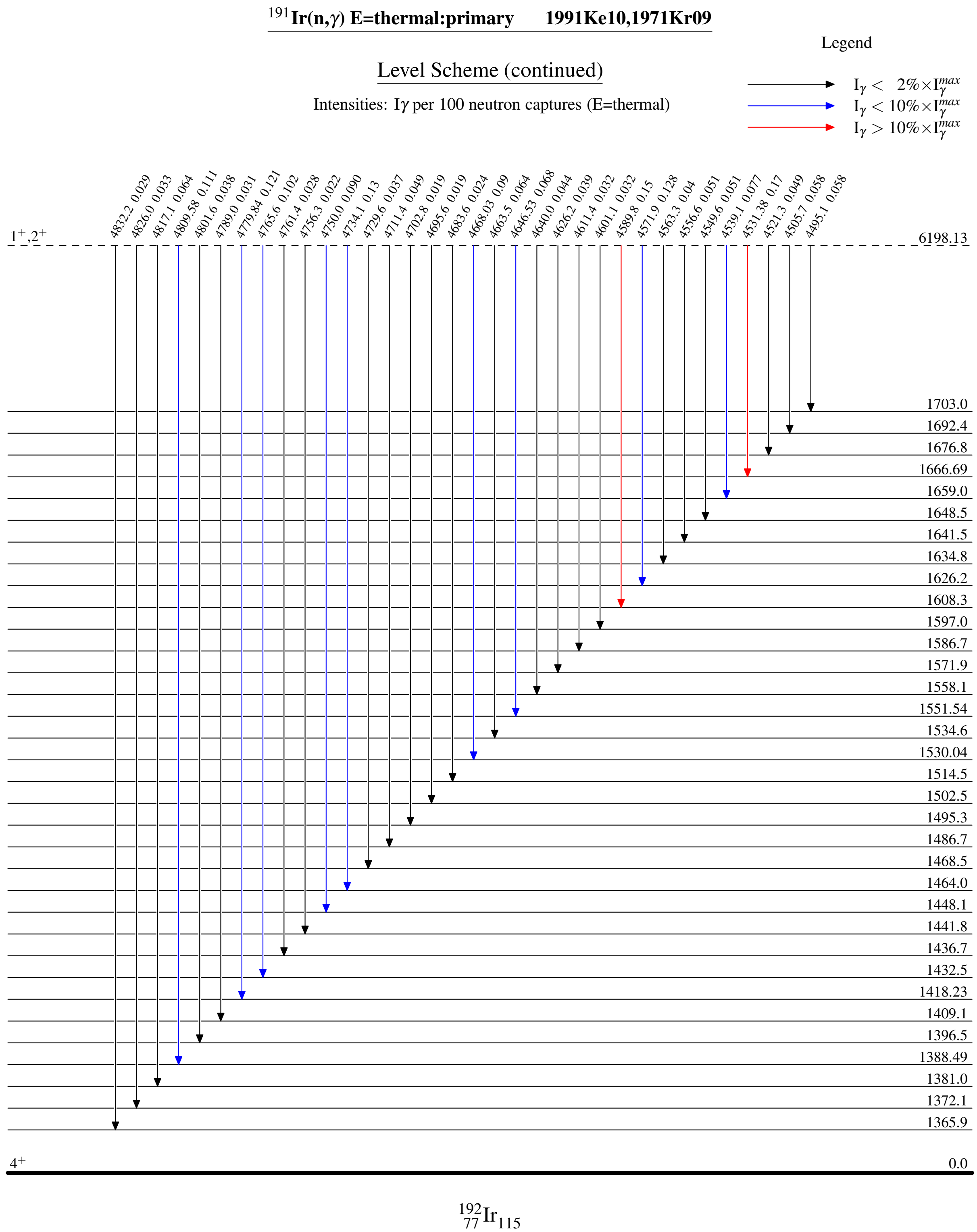


^{191}Ir(n,γ) E=thermal:primary 1991Ke10,1971Kr09

Level Scheme (continued)

Intensities: Iγ per 100 neutron captures (E=thermal)




^{191}Ir(n,γ) E=thermal:primary 1991Ke10,1971Kr09
Legend
Level Scheme (continued)
Intensities: Iγ per 100 neutron captures (E=thermal)
Iγ < 2%×Iγmax
Iγ < 10%×Iγmax
Iγ > 10%×Iγmax
4832.2 0.029
4826.0 0.033
4817.1 0.064
4809.58 0.111
4801.6 0.038
4789.0 0.031
4779.84 0.121
4765.6 0.102
4761.4 0.028
4756.3 0.022
4750.0 0.090
4734.1 0.13
4729.6 0.037
4711.4 0.049
4702.8 0.019
4695.6 0.019
4683.6 0.024
4668.03 0.09
4663.5 0.064
4646.53 0.068
4640.0 0.044
4626.2 0.039
4611.4 0.032
4601.1 0.032
4589.8 0.15
4571.9 0.128
4563.3 0.04
4556.6 0.051
4549.6 0.051
4539.1 0.077
4531.38 0.17
4521.3 0.049
4505.7 0.058
4495.1 0.058
1+,2+
6198.13
1703.0
1692.4
1676.8
1666.69
1659.0
1648.5
1641.5
1634.8
1626.2
1608.3
1597.0
1586.7
1571.9
1558.1
1551.54
1534.6
1530.04
1514.5
1502.5
1495.3
1486.7
1468.5
1464.0
1448.1
1441.8
1436.7
1432.5
1418.23
1409.1
1396.5
1388.49
1381.0
1372.1
1365.9
4+
0.0
$^{192}_{77}Ir_{115}$