

$^{127}\text{I}(\text{n},\gamma)$ E=thermal:primary **1990Is03**

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Zoltan Elekes and Janos Timar		NDS 129, 191 (2015)	28-Feb-2015

1990Is03: pair-spectrometer; E γ , I γ .

Others: **1971Sc07**, **1968Gr32**, **1966Ar09**, **1959Kn63**, **2007ChZX**.

J $^{\pi}$ (target)=5/2 $^{+}$.

 ^{128}I Levels

E(level) †	J $^{\pi}$	E(level) †	J $^{\pi}$	E(level) †	J $^{\pi}$
0.0	1 $^{+}$	863.90 $^{\dagger}_{-3}$ 13		1455.39 13	(≤ 3)
27.32 11	2 $^{+}$	867.20 $^{\dagger}_{-3}$ 13		1486.87 9	
85.54 10	3 $^{+}$	881.01 $^{\dagger}_{-3}$ 10		1507.01 16	
128.28 10	(4) $^{+}$	885.2 $^{\dagger}_{-3}$ 3		1527.83 9	(2 $^{-}$,3,4 $^{-}$)
133.65 9	2 $^{-}$	916.75 11	(≤ 4)	1532.80 17	2 $^{+}$,3,4 $^{-}$
137.96 10	4 $^{-}$	934.14 9	(2 $^{-}$,3,4)	1538.16 10	
144.03 9	(3) $^{-}$	938.84 $^{\dagger}_{-3}$ 18		1574.9 4	
151.48 13	(3) $^{+}$	944.78 13		1580.06 11	
160.77 10	1 $^{+}$,2 $^{+}$	973.67 $^{\dagger}_{-3}$ 24		1598.46 13	
180.40 9	(3) $^{+}$	983.9 $^{\dagger}_{-3}$ 3		1615.99 9	
220.6 4	(1,2,3) $^{+}$	985.92 $^{\dagger}_{-3}$ 17		1628.12 9	(1,2,3)
232.2 4	4 $^{+}$	1006.68 $^{\dagger}_{-3}$ 17		1651.08 25	
295.58 17	(2,3,4) $^{+}$	1016.00 $^{\dagger}_{-3}$ 19		1691.71 16	
344.26 21	(2,3,4) $^{+}$	1032.07 9	(2 $^{+}$,3,4 $^{-}$)	1702.20 20	(3 $^{-}$,4,5 $^{-}$)
346.2 $^{\dagger}_{-3}$ 8		1048.65 10	(1,2,3 $^{+}$)	1715.78 15	
372.36 11		1062.20 19		1729.73 9	
376.73 9	(4) $^{-}$	1084.59 9	(≤ 4)	1734.10 9	(2,3,4)
385.30 11	2 $^{+}$,3 $^{+}$	1091.92 $^{\dagger}_{-3}$ 12		1739.73 11	
391.97 11	(1,2,3) $^{+}$	1100.12 9		1745.52 13	
415.98 18	(2,3) $^{+}$	1135.82 $^{\dagger}_{-3}$ 14		1761.11 11	
426.9 3	$^{+}$	1149.14 15		1772.8 4	
435.51 9	(2,3) $^{-}$	1163.41 17	(≤ 3)	1783.02 10	
485.33 19	(≤ 4)	1169.02 10		1793.32 14	
518.50 9	(3,4) $^{-}$	1178.60 10		1807.44 9	
536.39 $^{\dagger}_{-3}$ 12		1197.51 16		1818.19 20	
549.71 21	(3 $^{+}$,4 $^{+}$)	1219.0 3	2 $^{+}$,3,4 $^{+}$	1825.65 9	
554.44 9	(2 $^{-}$,3,4 $^{-}$)	1246.90 9	2 $^{+}$,3,4 $^{-}$	1844.00 15	
608.54 15	(3,4) $^{-}$	1251.56 9	(2 $^{-}$,3,4 $^{-}$)	1863.5 4	
613.97 11		1256.0 3		1875.99 15	
656.4 4		1266.40 9	(2 $^{-}$,3 $^{+}$)	1905.5 4	
661.40 $^{\dagger}_{-3}$ 11		1275.50 11	(≤ 4)	1918.6 3	
676.73 $^{\dagger}_{-3}$ 13		1301.78 13	(2 $^{+}$,3,4 $^{-}$)	1922.5 4	(≤ 4)
687.03 12	(3,4) $^{-}$	1303.79 15		1933.11 11	
704.90 $^{\dagger}_{-3}$ 19		1330.20 10	(≤ 4)	1943.1 3	
750.01 16	(≤ 4)	1336.21 13		1947.04 9	
770.7 $^{\dagger}_{-3}$ 4		1343.21 9	(3 $^{-}$,4,5)	1971.85 21	
787.99 $^{\dagger}_{-3}$ 19		1348.95 20	(9 $^{-}$)	1983.9 3	(≤ 3)
791.9 $^{\dagger}_{-3}$ 5		1362.61 9		1987.7 3	
795.62 21		1382.94 11		2013.0 5	
821.44 $^{\dagger}_{-3}$ 11		1391.90 11		2037.64 13	
828.34 10		1418.55 13		2050.89 15	(1 $^{+}$)
840.04 10	(1 $^{-}$,2,3 $^{+}$)	1429.97 16		2067.21 10	
843.52 12		1439.08 13	(1 $^{+}$)	2069.98 10	
849.34 $^{\dagger}_{-3}$ 10	(≤ 4)	1441.61 11		2082.37 13	

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$^{127}\text{I}(\text{n},\gamma)$ E=thermal:primary **1990Is03** (continued) ^{128}I Levels (continued)

E(level) [†]	J ^π	Comments
2115.52 10		
2130.45 24		
2143.76 20	1,2,3	
2150.49 20		
2162.01 17		
2166.62 13		
2187.69 12		
2191.35 13		
2204.71 13	(≤4)	
2206.70? 13		
2320.65 10	(≤4)	
(6826.20 9)	2 ⁺ ,3 ⁺	J ^π : L=0 capture on 5/2 ⁺ target.

[†] Deduced from E γ and Sn(=6826.13 5), and with the recoil correction by evaluator.

[‡] No de-exciting γ 's are observed in data of (n, γ) secondary.

 $\gamma(^{128}\text{I})$

E γ [†]	I γ ^{‡#}	E _i (level)	J _i ^π	E _f	J _f ^π
^x 4501.49 16	43 3				
4505.46 4	133 7	(6826.20)	2 ⁺ ,3 ⁺	2320.65	(≤4)
^x 4509.00 8	73 4				
^x 4511.57 9	59 4				
^x 4516.57 4	132 6				
^x 4523.60 6	81 4				
^x 4526.48 19	24 3				
^x 4530.28 6	84 5				
^x 4534.7 3	17 2				
^x 4538.75 11	47 3				
^x 4542.92 5	112 5				
^x 4545.69 6	103 5				
^x 4548.66 12	42 3				
^x 4553.27 24	25 4				
^x 4557.94 22	25 3				
^x 4563.1 3	22 3				
^x 4570.8 6	42 10				
^x 4571.7 6	55 11				
^x 4578.8 7	14 5				
^x 4584.59 12	83 6				
^x 4587.8 3	50 5				
^x 4591.05 20	47 5				
^x 4594.68 25	39 4				
^x 4600.31 6	96 5				
^x 4603.05 4	127 6				
^x 4612.49 10	47 3				
^x 4615.98 18	30 3				
4619.41 @ 9	74 5	(6826.20)	2 ⁺ ,3 ⁺	2206.70?	
4621.40 10	60 4	(6826.20)	2 ⁺ ,3 ⁺	2204.71	(≤4)
^x 4625.39 6	98 6				
4634.76 10	53 4	(6826.20)	2 ⁺ ,3 ⁺	2191.35	
4638.42 8	67 4	(6826.20)	2 ⁺ ,3 ⁺	2187.69	
^x 4641.73 7	78 4				

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$^{127}\text{I}(\text{n},\gamma)$ E=thermal:primary **1990Is03** (continued) $\gamma(^{128}\text{I})$ (continued)

E_γ †	I_γ ‡#	$E_i(\text{level})$	J_i^π	E_f	J_f^π
^x 4646.8 6	10 2				
^x 4651.04 8	90 7				
^x 4656.7 3	11 2				
4659.48 10	92 5	(6826.20)	2 ⁺ ,3 ⁺	2166.62	
4664.09 14	46 4	(6826.20)	2 ⁺ ,3 ⁺	2162.01	
^x 4666.54 11	68 5				
^x 4670.29 8	103 6				
4675.61 18	38 5	(6826.20)	2 ⁺ ,3 ⁺	2150.49	
4682.34 18	30 4	(6826.20)	2 ⁺ ,3 ⁺	2143.76	1,2,3
^x 4685.59 22	21 5				
^x 4691.10 7	82 5				
4695.65 22	20 5	(6826.20)	2 ⁺ ,3 ⁺	2130.45	
^x 4697.7 6	8 2				
^x 4702.9 3	22 2				
^x 4707.10 25	19 3				
4710.58 4	147 7	(6826.20)	2 ⁺ ,3 ⁺	2115.52	
^x 4713.5 3	21 3				
^x 4718.4 4	11 2				
^x 4728.67 6	59 4				
^x 4732.88 21	23 3				
^x 4734.68 19	30 3				
^x 4741.42 8	65 4				
4743.73 9	50 3	(6826.20)	2 ⁺ ,3 ⁺	2082.37	
^x 4748.79 4	82 4				
^x 4752.80 20	26 2				
4756.12 4	102 5	(6826.20)	2 ⁺ ,3 ⁺	2069.98	
4758.89 4	120 6	(6826.20)	2 ⁺ ,3 ⁺	2067.21	
^x 4763.54 14	23 2				
^x 4770.85 6	77 4				
4775.21 12	36 2	(6826.20)	2 ⁺ ,3 ⁺	2050.89	(1 ⁺)
^x 4783.20 9	106 7				
4788.46 10	72 5	(6826.20)	2 ⁺ ,3 ⁺	2037.64	
^x 4796.02 12	61 5				
^x 4805.38 3	156 7				
4813.1 5	5 2	(6826.20)	2 ⁺ ,3 ⁺	2013.0	
^x 4816.26 8	53 4				
^x 4828.7 3	49 9				
4838.40 25	68 9	(6826.20)	2 ⁺ ,3 ⁺	1987.7	
4842.16 25	38 9	(6826.20)	2 ⁺ ,3 ⁺	1983.9	(≤3)
^x 4844.8 3	32 6				
^x 4851.77 5	106 5				
4854.25 19	28 3	(6826.20)	2 ⁺ ,3 ⁺	1971.85	
^x 4858.4 5	10 2				
^x 4864.27 12	41 3				
^x 4869.7 5	20 2				
^x 4872.89 6	90 5				
4879.06 3	164 7	(6826.20)	2 ⁺ ,3 ⁺	1947.04	
4882.98 25	20 2	(6826.20)	2 ⁺ ,3 ⁺	1943.1	
4892.98 7	190 10	(6826.20)	2 ⁺ ,3 ⁺	1933.11	
^x 4894.84 25	23 3				
4903.6 4	22 3	(6826.20)	2 ⁺ ,3 ⁺	1922.5	(≤4)
4907.5 3	53 5	(6826.20)	2 ⁺ ,3 ⁺	1918.6	
^x 4913.6 3	53 6				
4920.6 4	36 4	(6826.20)	2 ⁺ ,3 ⁺	1905.5	
^x 4927.7 5	81 4				
^x 4937.2 6	250 12				

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$^{127}\text{I}(\text{n},\gamma)$ E=thermal:primary **1990Is03** (continued) $\gamma(^{128}\text{I})$ (continued)

E_γ [†]	I_γ ^{‡#}	$E_i(\text{level})$	J_i^π	E_f	J_f^π
4950.10 12	451 19	(6826.20)	2 ⁺ ,3 ⁺	1875.99	
^x 4954.7 3	106 6				
4962.6 4	13 2	(6826.20)	2 ⁺ ,3 ⁺	1863.5	
4982.09 12	48 4	(6826.20)	2 ⁺ ,3 ⁺	1844.00	
^x 4984.16 16	29 2				
^x 4996.59 13	30 3				
5000.44 2	249 10	(6826.20)	2 ⁺ ,3 ⁺	1825.65	
5007.90 18	9 1	(6826.20)	2 ⁺ ,3 ⁺	1818.19	
^x 5015.29 4	158 7				
5018.65 3	253 11	(6826.20)	2 ⁺ ,3 ⁺	1807.44	
^x 5029.73 5	100 5				
5032.77 11	42 3	(6826.20)	2 ⁺ ,3 ⁺	1793.32	
5043.07 4	131 6	(6826.20)	2 ⁺ ,3 ⁺	1783.02	
^x 5045.97 13	43 3				
5053.3 4	12 2	(6826.20)	2 ⁺ ,3 ⁺	1772.8	
5064.98 7	62 3	(6826.20)	2 ⁺ ,3 ⁺	1761.11	
^x 5069.19 25	18 2				
5080.57 10	13 1	(6826.20)	2 ⁺ ,3 ⁺	1745.52	
5086.36 6	38 3	(6826.20)	2 ⁺ ,3 ⁺	1739.73	
5091.99 2	389 16	(6826.20)	2 ⁺ ,3 ⁺	1734.10	(2,3,4)
5096.36 3	267 11	(6826.20)	2 ⁺ ,3 ⁺	1729.73	
5110.31 12	89 5	(6826.20)	2 ⁺ ,3 ⁺	1715.78	
^x 5118.92 8	57 3				
5123.89 18	19 3	(6826.20)	2 ⁺ ,3 ⁺	1702.20	(3 ⁻ ,4,5 ⁻)
^x 5128.36 26	18 4				
5134.38 13	38 2	(6826.20)	2 ⁺ ,3 ⁺	1691.71	
^x 5137.42 5	83 4				
^x 5141.90 20	10 1				
^x 5151.28 8	58 3				
^x 5155.91 7	45 3				
5175.00 23	14 2	(6826.20)	2 ⁺ ,3 ⁺	1651.08	
^x 5181.03 8	47 3				
5197.96 2	826 34	(6826.20)	2 ⁺ ,3 ⁺	1628.12	(1,2,3)
^x 5204.65 8	60 3				
5210.09 2	227 9	(6826.20)	2 ⁺ ,3 ⁺	1615.99	
^x 5221.85 13	26 3				
5227.62 10	48 3	(6826.20)	2 ⁺ ,3 ⁺	1598.46	
^x 5231.97 22	12 4				
5246.02 7	53 3	(6826.20)	2 ⁺ ,3 ⁺	1580.06	
5251.2 4	12 2	(6826.20)	2 ⁺ ,3 ⁺	1574.9	
^x 5256.27 18	17 2				
^x 5269.16 8	66 3				
^x 5272.09 3	229 10				
^x 5281.53 7	42 2				
5287.92 4	110 5	(6826.20)	2 ⁺ ,3 ⁺	1538.16	
5293.28 14	21 8	(6826.20)	2 ⁺ ,3 ⁺	1532.80	2 ⁺ ,3,4 ⁻
5298.25 2	444 18	(6826.20)	2 ⁺ ,3 ⁺	1527.83	(2 ⁻ ,3,4 ⁻)
^x 5310.38 8	8 2				
5319.07 13	29 2	(6826.20)	2 ⁺ ,3 ⁺	1507.01	
^x 5321.81 11	39 3				
^x 5333.83 15	23 2				
5339.21 3	185 8	(6826.20)	2 ⁺ ,3 ⁺	1486.87	
^x 5353.79 23	23 2				
^x 5359.95 6	69 4				
^x 5363.5 3	10 2				
5370.68 10	44 3	(6826.20)	2 ⁺ ,3 ⁺	1455.39	(≤3)

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$^{127}\text{I}(\text{n},\gamma)$ E=thermal:primary **1990Is03** (continued) $\gamma(^{128}\text{I})$ (continued)

E_γ †	I_γ ‡#	$E_i(\text{level})$	J_i^π	E_f	J_f^π
^x 5373.28 11	39 3				
^x 5379.3 3	13 2				
5384.46 6	122 6	(6826.20)	2 ⁺ ,3 ⁺	1441.61	
5386.99 9	56 3	(6826.20)	2 ⁺ ,3 ⁺	1439.08	(1 ⁺)
5396.10 13	30 2	(6826.20)	2 ⁺ ,3 ⁺	1429.97	
5407.52 10	54 5	(6826.20)	2 ⁺ ,3 ⁺	1418.55	
^x 5409.88 10	57 5				
^x 5418.11 7	49 3				
^x 5425.76 9	37 2				
5434.17 7	46 3	(6826.20)	2 ⁺ ,3 ⁺	1391.90	
5443.13 6	66 3	(6826.20)	2 ⁺ ,3 ⁺	1382.94	
^x 5448.40 7	54 3				
^x 5453.69 12	33 2				
^x 5459.49 12	34 2				
5463.46 2	430 18	(6826.20)	2 ⁺ ,3 ⁺	1362.61	
5477.12 18	15 1	(6826.20)	2 ⁺ ,3 ⁺	1348.95	(9 ⁻)
5482.86 2	411 17	(6826.20)	2 ⁺ ,3 ⁺	1343.21	(3 ⁻ ,4,5)
5489.86 10	46 2	(6826.20)	2 ⁺ ,3 ⁺	1336.21	
5495.87 4	111 5	(6826.20)	2 ⁺ ,3 ⁺	1330.20	(≤4)
5522.28 12	67 5	(6826.20)	2 ⁺ ,3 ⁺	1303.79	
5524.29 9	124 7	(6826.20)	2 ⁺ ,3 ⁺	1301.78	(2 ⁺ ,3,4 ⁻)
5550.57 6	61 3	(6826.20)	2 ⁺ ,3 ⁺	1275.50	(≤4)
5559.67 2	901 37	(6826.20)	2 ⁺ ,3 ⁺	1266.40	(2 ⁻ ,3 ⁺)
5570.1 3	10 1	(6826.20)	2 ⁺ ,3 ⁺	1256.0	
5574.51 2	485 20	(6826.20)	2 ⁺ ,3 ⁺	1251.56	(2 ⁻ ,3,4 ⁻)
5579.17 2	256 11	(6826.20)	2 ⁺ ,3 ⁺	1246.90	2 ⁺ ,3,4 ⁻
^x 5598.61 11	33 2				
^x 5601.24 8	64 3				
5607.1 3	13 1	(6826.20)	2 ⁺ ,3 ⁺	1219.0	2 ⁺ ,3,4 ⁺
5628.55 13	23 2	(6826.20)	2 ⁺ ,3 ⁺	1197.51	
5647.46 5	70 3	(6826.20)	2 ⁺ ,3 ⁺	1178.60	
5657.04 4	84 4	(6826.20)	2 ⁺ ,3 ⁺	1169.02	
5662.65 15	22 1	(6826.20)	2 ⁺ ,3 ⁺	1163.41	(≤3)
5676.92 12	27 1	(6826.20)	2 ⁺ ,3 ⁺	1149.14	
5690.24 11	26 1	(6826.20)	2 ⁺ ,3 ⁺	1135.82	
^x 5695.3 3	12 1				
5725.94 2	474 19	(6826.20)	2 ⁺ ,3 ⁺	1100.12	
5734.14 8	41 3	(6826.20)	2 ⁺ ,3 ⁺	1091.92	
5741.47 2	222 9	(6826.20)	2 ⁺ ,3 ⁺	1084.59	(≤4)
^x 5757.28 21	12 1				
5763.86 17	17 1	(6826.20)	2 ⁺ ,3 ⁺	1062.20	
5777.41 5	66 3	(6826.20)	2 ⁺ ,3 ⁺	1048.65	(1,2,3 ⁺)
5793.98 3	166 7	(6826.20)	2 ⁺ ,3 ⁺	1032.07	(2 ⁺ ,3,4 ⁻)
5810.05 17	11 1	(6826.20)	2 ⁺ ,3 ⁺	1016.00	
5819.37 14	22 2	(6826.20)	2 ⁺ ,3 ⁺	1006.68	
5840.13 14	54 4	(6826.20)	2 ⁺ ,3 ⁺	985.92	
5842.2@ 3	16 2	(6826.20)	2 ⁺ ,3 ⁺	983.9?	
5852.38@ 22	14 1	(6826.20)	2 ⁺ ,3 ⁺	973.67?	
5881.27 9	33 2	(6826.20)	2 ⁺ ,3 ⁺	944.78	
5887.21@ 16	18 1	(6826.20)	2 ⁺ ,3 ⁺	938.84?	
5891.91 3	155 7	(6826.20)	2 ⁺ ,3 ⁺	934.14	(2 ⁻ ,3,4)
5909.30 6	58 3	(6826.20)	2 ⁺ ,3 ⁺	916.75	(≤4)
5940.8@ 3	8 2	(6826.20)	2 ⁺ ,3 ⁺	885.2?	
5945.04 5	74 4	(6826.20)	2 ⁺ ,3 ⁺	881.01	
5958.85 10	35 2	(6826.20)	2 ⁺ ,3 ⁺	867.20	

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$^{127}\text{I}(\text{n},\gamma)$ E=thermal:primary **1990Is03** (continued) $\gamma(^{128}\text{I})$ (continued)

$E_\gamma^\dagger$	$I_\gamma^{\ddagger\#}$	$E_i(\text{level})$	J_i^π	E_f	J_f^π
5962.15@ 10	31 2	(6826.20)	$2^+, 3^+$	863.90?	
5976.71 5	73 4	(6826.20)	$2^+, 3^+$	849.34	(≤ 4)
5982.53 8	59 3	(6826.20)	$2^+, 3^+$	843.52	
5986.00 4	128 5	(6826.20)	$2^+, 3^+$	840.04	($1^-, 2, 3^+$)
5997.70 4	105 5	(6826.20)	$2^+, 3^+$	828.34	
6004.60@ 6	58 3	(6826.20)	$2^+, 3^+$	821.44?	
6030.42 19	13 1	(6826.20)	$2^+, 3^+$	795.62	
6034.1@ 5	4 1	(6826.20)	$2^+, 3^+$	791.9?	
6038.05 17	13 2	(6826.20)	$2^+, 3^+$	787.99	
6055.3@ 4	8 1	(6826.20)	$2^+, 3^+$	770.7?	
6076.03 13	22 1	(6826.20)	$2^+, 3^+$	750.01	(≤ 4)
6121.14 17	15 1	(6826.20)	$2^+, 3^+$	704.90	
6139.01 8	43 3	(6826.20)	$2^+, 3^+$	687.03	($3, 4$) ⁻
6149.31 9	37 2	(6826.20)	$2^+, 3^+$	676.73	
6164.64 6	61 3	(6826.20)	$2^+, 3^+$	661.40	
6169.6 4	6 1	(6826.20)	$2^+, 3^+$	656.4	
6212.06 6	52 3	(6826.20)	$2^+, 3^+$	613.97	
6217.49 12	27 2	(6826.20)	$2^+, 3^+$	608.54	($3, 4$) ⁻
6271.59 2	207 9	(6826.20)	$2^+, 3^+$	554.44	($2^-, 3, 4^-$)
6276.32 19	19 2	(6826.20)	$2^+, 3^+$	549.71	($3^+, 4^+$)
6289.64@ 8	44 2	(6826.20)	$2^+, 3^+$	536.39?	
6307.53 2	576 23	(6826.20)	$2^+, 3^+$	518.50	($3, 4$) ⁻
6340.70 17	17 1	(6826.20)	$2^+, 3^+$	485.33	(≤ 4)
6390.51 2	271 11	(6826.20)	$2^+, 3^+$	435.51	($2, 3$) ⁻
6399.1 3	11 1	(6826.20)	$2^+, 3^+$	426.9	⁺
6410.04 16	16 1	(6826.20)	$2^+, 3^+$	415.98	($2, 3$) ⁺
6434.05 6	47 2	(6826.20)	$2^+, 3^+$	391.97	($1, 2, 3$) ⁺
6440.72 6	64 3	(6826.20)	$2^+, 3^+$	385.30	$2^+, 3^+$
6449.29 3	132 6	(6826.20)	$2^+, 3^+$	376.73	(4) ⁻
6453.66 6	59 3	(6826.20)	$2^+, 3^+$	372.36	
6479.8@ 8	5 1	(6826.20)	$2^+, 3^+$	346.2?	
6481.76 19	51 4	(6826.20)	$2^+, 3^+$	344.26	($2, 3, 4$) ⁺
6530.44 14	19 1	(6826.20)	$2^+, 3^+$	295.58	($2, 3, 4$) ⁺
6593.8 4	7 1	(6826.20)	$2^+, 3^+$	232.2	4^+
6605.4 4	9 1	(6826.20)	$2^+, 3^+$	220.6	($1, 2, 3$) ⁺
6645.61 2	185 8	(6826.20)	$2^+, 3^+$	180.40	(3) ⁺
6665.24 5	53 3	(6826.20)	$2^+, 3^+$	160.77	$1^+, 2^+$
6674.53 9	25 1	(6826.20)	$2^+, 3^+$	151.48	(3) ⁺
6681.98 2	227 9	(6826.20)	$2^+, 3^+$	144.03	(3) ⁻
6688.05 4	107 5	(6826.20)	$2^+, 3^+$	137.96	4^-
6692.36 2	507 21	(6826.20)	$2^+, 3^+$	133.65	2^-
6697.73 4	126 5	(6826.20)	$2^+, 3^+$	128.28	(4) ⁺
6740.46 5	72 8	(6826.20)	$2^+, 3^+$	85.54	3^+
6798.68 6	38 2	(6826.20)	$2^+, 3^+$	27.32	2^+
6826.00 9	21 2	(6826.20)	$2^+, 3^+$	0.0	1^+

[†] From **1990Is03**. Uncertainty of ^{15}N separation energy of 12 keV is included in the uncertainty of energy of γ rays by authors of **1990Is03**.

[‡] From **1990Is03**. ΔI_γ does not include error of 5% in the cross section.

[#] For intensity per 100 neutron captures, multiply by 0.001.

@ Placement of transition in the level scheme is uncertain.

^x γ ray not placed in level scheme.

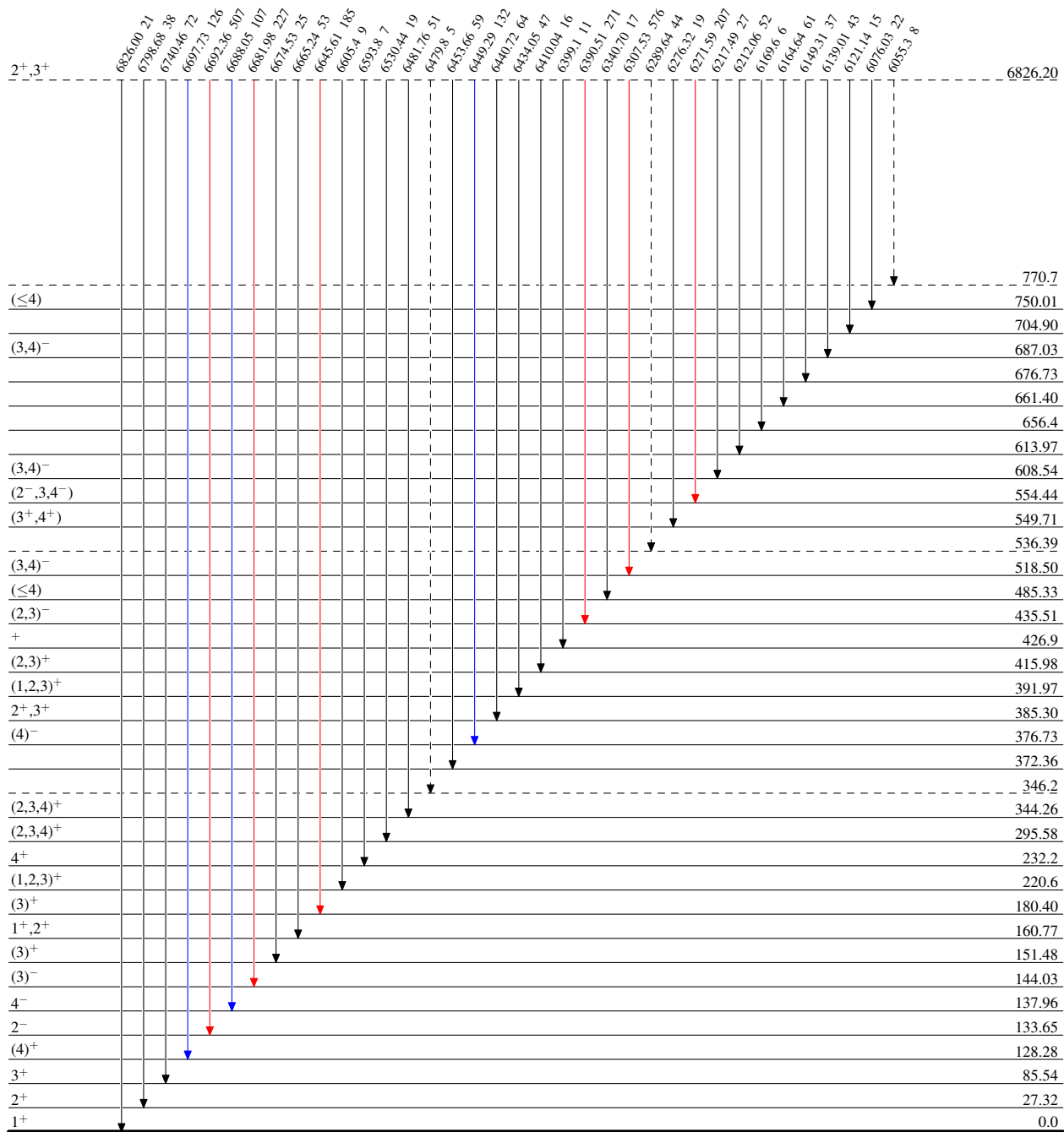
$^{127}\text{I}(\text{n},\gamma)$ E=thermal:primary 1990Is03

Legend

Level Scheme

Intensities: Relative I_γ

- $\longrightarrow$ $I_\gamma < 2\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma < 10\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma > 10\% \times I_\gamma^{\max}$
 $\longrightarrow$ γ Decay (Uncertain)



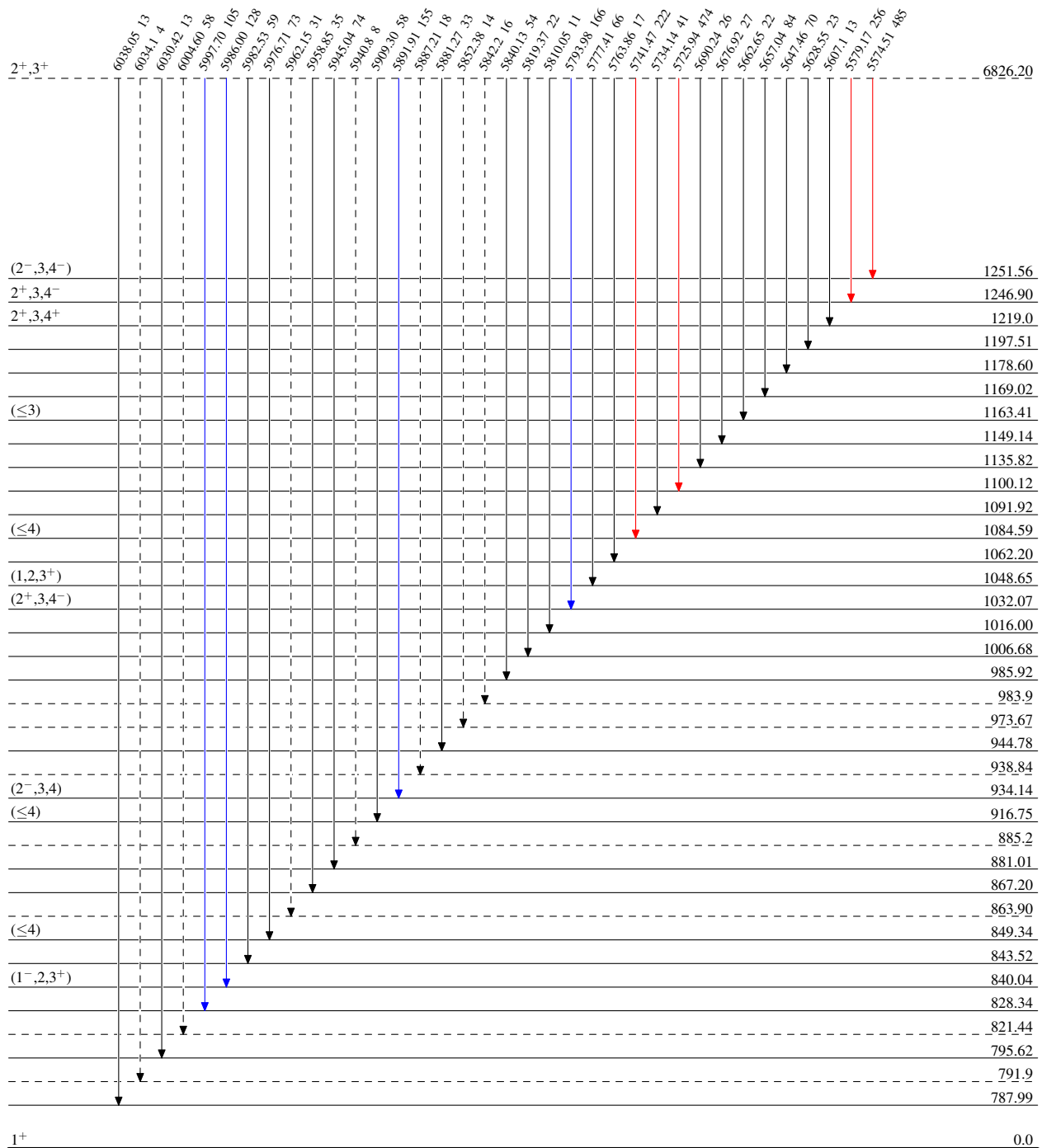
$^{127}\text{I}(n,\gamma)$ E=thermal:primary 1990Is03

Legend

Level Scheme (continued)

Intensities: Relative I_γ

- $\longrightarrow$ $I_\gamma < 2\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma < 10\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma > 10\% \times I_\gamma^{\max}$
 $\longrightarrow$ γ Decay (Uncertain)



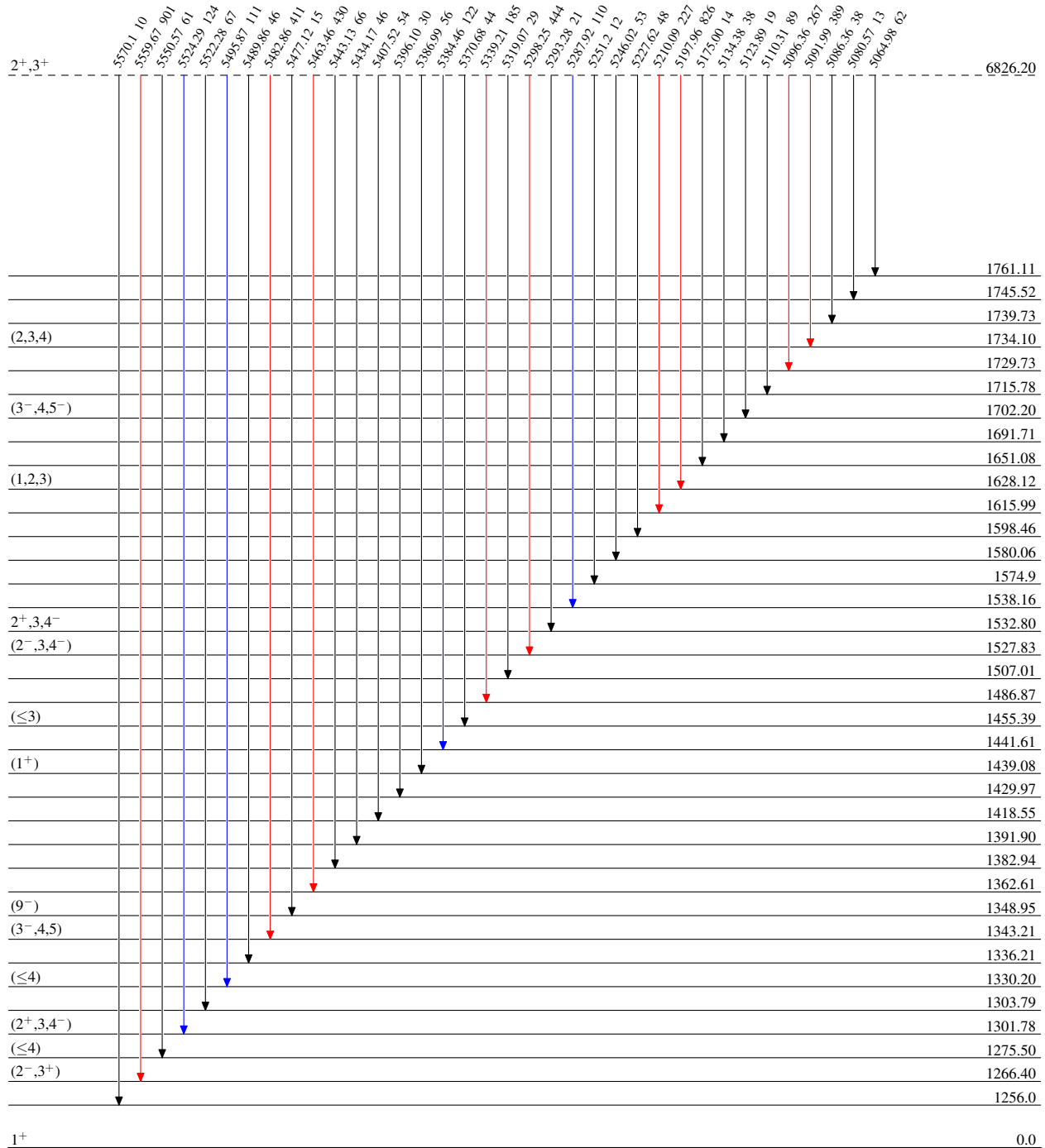
$^{127}\text{I}(\text{n},\gamma)$ E=thermal:primary 1990Is03

Level Scheme (continued)

Intensities: Relative I_γ

Legend

- $\longrightarrow$ $I_\gamma < 2\% \times I_\gamma^{\text{max}}$
 $\longrightarrow$ $I_\gamma < 10\% \times I_\gamma^{\text{max}}$
 $\longrightarrow$ $I_\gamma > 10\% \times I_\gamma^{\text{max}}$



$^{127}\text{I}(n,\gamma)$ E=thermal:primary 1990Is03

Legend

Level Scheme (continued)

Intensities: Relative I_γ

- $\longrightarrow$ $I_\gamma < 2\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma < 10\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma > 10\% \times I_\gamma^{\max}$
 $\longrightarrow$ γ Decay (Uncertain)

