

$^{65}\text{Cu}(n,\gamma)$ E=thermal 1983De29

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	E. Browne, J. K. Tuli	NDS 111, 1093 (2010)	3-Mar-2009

Additional information 1.

1983De29: E=polarized and unpolarized thermal, 2-, 24-keV neutrons; measured $E\gamma$, $I\gamma$, γ circular polarization.

1968Sh01: $E\gamma$, $I\gamma$ and $\gamma\gamma$ coincidences.

1967Co18, 1968Ma17, 1969Al11: $E\gamma$ and $I\gamma$.

1973Ko16: polarized neutrons; measured γ circular polarization.

Other: 1965Ru06.

 ^{66}Cu Levels

The J^π assignments from this data set are given in comments. They are based on circular polarization measurements for polarized neutron capture γ rays (assumed to be pure E1 transitions) combined with L(d,p) and L(d, α) data of 1969Da09 (1983De29).

E(level) [†]	J^π [‡]	Comments
0.0	1 ⁺	J^π : 1 ⁺ .
185.953 15	2 ⁺	J^π : 1 ⁺ ,2 ⁺ ,3 ⁺ .
237.822 11		
275.030 17	3 ⁺	J^π : 3 ⁺ .
385.782 10	(1 ⁺)	J^π : 1 ⁺ ,2 ⁺ .
465.165 10	2 ⁺	J^π : 1 ⁺ ,2 ⁺ .
590.75 2	4 ⁺	
729.824 18	3 ⁺	J^π : 3 ⁺ .
822.691 10	2 ⁺	J^π : 1 ⁺ ,2 ⁺ .
1008.49 10		
1017.138 15	3 ⁺	J^π : 3 ⁺ .
1052.082 17	1 ⁺	J^π : 1 ⁺ ,2 ⁺ ,3 ⁺ .
1158.09 4	(2 ⁺ ,3)	
1212.515 20	1 ⁺ ,2 ⁺	J^π : 1 ⁺ ,2 ⁺ .
1247.152 24	4 ⁻	
1344.012 22	1 ⁺	J^π : 1 ⁺ ,2 ⁺ .
1439.408 25	(1 ⁺ ,2,3 ⁺)	
1547.39 4	1 ⁺ ,2 ⁺ ,3 ⁺	J^π : 1 ⁺ ,2 ⁺ ,3 ⁺ .
1560.15 9	+	
1577.34 5	1 ⁺ ,2 ⁺ ,3 ⁺	
1678.00 3	1 ⁺ ,2 ⁺	J^π : 1 ⁺ ,2 ⁺ .
1694.07 5	(1) ⁺	
1713.20 6	(1) ⁺	
1735.96 6	(4,5) ⁻	
1745.89 4	(1,2)	J^π : (1,2).
1820.352 14	1 ⁺	J^π : 1 ⁺ .
1911.31 8		
1927.19 5	1 ⁺ ,2 ⁺	J^π : 1 ⁺ ,2 ⁺ .
1971.18 5	2 ⁻	
2018.36 3	1 ⁺ ,2 ⁺ ,3 ⁺	J^π : 1 ⁺ ,2 ⁺ ,3 ⁺ .
2023.315 23	(1,2)	J^π : (1,2).
2124.09 10	2 ⁻	
2163.12 9	-	
2166.01 7	+	
2260.66 9		
2363.63 6		
2394.93 11		
2449.19 16		

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${}^{65}\text{Cu}(n,\gamma)$ E=thermal 1983De29 (continued) ${}^{66}\text{Cu}$ Levels (continued)

E(level) [†]	J^{π} [‡]	Comments
2453.05 5	(1 ⁺ ,2,3 ⁺)	
2503.00 9	(2 ⁺ ,3 ⁺)	J^{π} : (1 to 3).
2520.77 13	2 ⁻ ,3 ⁻ ,4 ⁻	
2560.43 16	2 ⁻	
2586.27 4		
2597.49 6		
2608.50 11		
2629.29 9	3 ⁺ ,4 ⁺	
2664.44 6	1 ⁻ ,2 ⁻	
2681.16 4	1 ⁺	J^{π} : 1 ⁺ .
2688.22 8	(1 ⁺)	
2739.16 7	2 ⁻ ,3 ⁻ ,4 ⁻	
2767.86 12	(1 ⁺)	
2799.85 7	(2 ⁻)	
2813.84 9	1 ⁻ ,2 ⁻	
2844.72 10	1 ⁻ ,2 ⁻	
2867.69 7	0 ⁺ ,1 ⁺	
2943.33 14	(1 ⁻ ,2 ⁻)	
2948.76 8	(1 ⁻ ,2 ⁻)	
2953.35 9	(1,2) ⁻	
2987.96 21		
3010.18 10	3 ⁺ ,4 ⁺ ,5 ⁺	
3026.09 6	(1 ⁻ ,2 ⁻)	
3045.95 13	(1 ⁻ ,2 ⁻)	
3048.82 11		
3077.29 12	(1 ⁻ ,2 ⁻)	
3091.37 6	(1 ⁻ ,2 ⁻)	
3099.08 8	(2 ⁺ ,3,4 ⁺)	
3110.86 6		
3141.74 15		
3151.97 9		
3165.77 7	(1,2,3) ⁺	
3208.95 8		
3247.83 8		
3287.36 9	+	
3333.77 5	+	
3342.06 11		
3371.23 9		
3397.63 11		
3432.37 13		
3479.48 12		
3487.05 10	(2 ⁺ ,3 ⁺)	
3508.84 11	(2 ⁺ ,3,4 ⁺)	
3535.49 7		
3583.53 12		
3601.00 6		
3636.56 7	1 ⁻ ,2 ⁻	
3705.08 11	2 ⁻ ,3 ⁻ ,4 ⁻	
3750.30 8		
3780.19 10		
3814.66 10	1 ⁻ ,2 ⁻	
3896.38 8	(2 ⁻)	
3934.58 15	(1 ⁻ ,2 ⁻)	
4013.69 12	(1 ⁺ ,2,3 ⁺)	
4056.98 8	(1,2) ⁻	
4116.41 10		

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$^{65}\text{Cu}(n,\gamma)$ E=thermal 1983De29 (continued) ^{66}Cu Levels (continued)

E(level) [†]	J ^π [‡]	Comments
4300.2 3		
4462.70 10	(1,2) ⁻	
4527.91 9	(1,2) ⁻	
4850.76 8		
5077.21 8		
7066.22 2	1 ⁻ ,2 ⁻	J ^π : From s-wave neutron capture on 3/2 ⁻ target. E(level): 7065.93 keV 9 in 2009AuZZ, 2003Au03.

[†] From least-squares fit to E_γ data.

[‡] From Adopted Levels.

$\gamma(^{66}\text{Cu})$					
E _γ [†]	I _γ [‡]	E _i (level)	J _i ^π	E _f	J _f ^π
89.18 4	10.9 11	275.030	3 ⁺	185.953	2 ⁺
100.15 23	0.14 5	1678.00	1 ⁺ ,2 ⁺	1577.34	1 ⁺ ,2 ⁺ ,3 ⁺
111.93 13	0.16 3	2023.315	(1,2)	1911.31	
114.36 16	0.107 24	3601.00		3487.05	(2 ⁺ ,3 ⁺)
186.01 & 5	41 5	185.953	2 ⁺	0.0	1 ⁺
190.10 3	0.83 9	465.165	2 ⁺	275.030	3 ⁺
194.47 3	0.76 8	1017.138	3 ⁺	822.691	2 ⁺
199.90 & 7	0.60 8	385.782	(1 ⁺)	185.953	2 ⁺
217.0 5	0.024 15	1560.15	⁺	1344.012	1 ⁺
234.26 14	0.19 4	2597.49		2363.63	
237.821 11	4.0 3	237.822		0.0	1 ⁺
^x 247.48 8	0.193 25				
274.92 9	0.152 20	275.030	3 ⁺	0.0	1 ⁺
279.33 & 11	0.35 7	465.165	2 ⁺	185.953	2 ⁺
^x 283.38 5	0.28 3				
289.2 3	0.057 22	2953.35	(1,2) ⁻	2664.44	1 ⁻ ,2 ⁻
^x 291.8 5	0.028 18				
315.711 & 21	4.1 3	590.75	4 ⁺	275.030	3 ⁺
334.03 16	0.16 3	1678.00	1 ⁺ ,2 ⁺	1344.012	1 ⁺
335.73 11	0.25 3	1158.09	(2 ⁺ ,3)	822.691	2 ⁺
^x 338.03 13	0.169 23				
340.19 12	0.157 22	2948.76	(1 ⁻ ,2 ⁻)	2608.50	
357.561 21	0.49 3	822.691	2 ⁺	465.165	2 ⁺
385.781 & 12	19.0 11	385.782	(1 ⁺)	0.0	1 ⁺
417.03 6	0.135 13	3814.66	1 ⁻ ,2 ⁻	3397.63	
422.01 12	0.096 13	1439.408	(1 ⁺ ,2,3 ⁺)	1017.138	3 ⁺
426.372 21	0.56 3	1017.138	3 ⁺	590.75	4 ⁺
436.912 & 12	1.90 10	822.691	2 ⁺	385.782	(1 ⁺)
454.8 5	0.44 21	729.824	3 ⁺	275.030	3 ⁺
457.6 5	0.39 20	3535.49		3077.29	(1 ⁻ ,2 ⁻)
^x 460.8 6	0.30 20				
465.152 & 12	22.3 11	465.165	2 ⁺	0.0	1 ⁺
482.69 10	0.44 5	1694.07	(1) ⁺	1212.515	1 ⁺ ,2 ⁺
^x 525.96 16	0.053 10				
^x 531.24 8	0.113 11				
533.96 7	0.120 11	3333.77	⁺	2799.85	(2) ⁻

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$^{65}\text{Cu}(n,\gamma)$ E=thermal 1983De29 (continued) $\gamma(^{66}\text{Cu})$ (continued)

E_γ †	I_γ ‡	E_i (level)	J_i^π	E_f	J_f^π
537.55 8	0.107 10	3583.53		3045.95	(1 ⁻ ,2 ⁻)
543.852& 13	4.19 15	729.824	3 ⁺	185.953	2 ⁺
^x 547.552 22	0.74 3				
551.953 22	0.486 21	1017.138	3 ⁺	465.165	2 ⁺
556.46 22	0.055 12	3077.29	(1 ⁻ ,2 ⁻)	2520.77	2 ⁻ ,3 ⁻ ,4 ⁻
567.35 9	0.169 16	1158.09	(2 ⁺ ,3)	590.75	4 ⁺
583.62 8	0.206 16	2023.315	(1,2)	1439.408	(1 ⁺ ,2,3 ⁺)
586.79 5	0.333 19	1052.082	1 ⁺	465.165	2 ⁺
622.69 10	0.090 8	1008.49		385.782	(1 ⁺)
632.67 6	0.140 9	2453.05	(1 ⁺ ,2,3 ⁺)	1820.352	1 ⁺
636.68 3	0.293 12	822.691	2 ⁺	185.953	2 ⁺
^x 645.99 8	0.110 10				
651.10 13	0.086 10	3750.30		3099.08	(2 ⁺ ,3,4 ⁺)
661.22 9	0.099 9	1713.20	(1 ⁺)	1052.082	1 ⁺
665.60@ 9	0.097 9	3479.48		2813.84	1 ⁻ ,2 ⁻
679.30 5	0.166 10	2023.315	(1,2)	1344.012	1 ⁺
^x 695.35 19	0.080 13				
714.66 19	0.72 14	1927.19	1 ⁺ ,2 ⁺	1212.515	1 ⁺ ,2 ⁺
723.99 5	0.537 24	1971.18	2 ⁻	1247.152	4 ⁻
^x 729.19 6	0.258 16				
^x 738.15 17	0.079 13				
741.94@ 3	0.384 15	3371.23		2629.29	3 ⁺ ,4 ⁺
747.48 3	0.386 15	3333.77	+	2586.27	
753.91 4	0.469 16	2681.16	1 ⁺	1927.19	1 ⁺ ,2 ⁺
758.83@ 9	0.171 14	1971.18	2 ⁻	1212.515	1 ⁺ ,2 ⁺
768.305& 23	1.00 3	1820.352	1 ⁺	1052.082	1 ⁺
770.64 25	0.094 18	3780.19		3010.18	3 ⁺ ,4 ⁺ ,5 ⁺
788.42 8	0.160 12	3151.97		2363.63	
^x 797.9 3	0.039 11				
^x 808.21 20	0.23 3				
810.47 19	0.26 3	2023.315	(1,2)	1212.515	1 ⁺ ,2 ⁺
814.27 4	0.79 3	1052.082	1 ⁺	237.822	
822.676 16	4.03 7	822.691	2 ⁺	0.0	1 ⁺
^x 826.80 17	0.125 20				
831.196 16	2.71 5	1017.138	3 ⁺	185.953	2 ⁺
^x 834.10 7	0.358 21				
847.42 5	0.41 3	1577.34	1 ⁺ ,2 ⁺ ,3 ⁺	729.824	3 ⁺
860.85 10	0.142 14	2681.16	1 ⁺	1820.352	1 ⁺
878.816 24	1.014 22	1344.012	1 ⁺	465.165	2 ⁺
883.03 4	0.365 16	1158.09	(2 ⁺ ,3)	275.030	3 ⁺
^x 899.14 7	0.141 9				
^x 903.18 12	0.079 9				
909.99@ 22	0.043 9	1927.19	1 ⁺ ,2 ⁺	1017.138	3 ⁺
^x 927.35 14	0.073 10				
937.507 17	1.143 22	1212.515	1 ⁺ ,2 ⁺	275.030	3 ⁺
948.09 3	0.382 12	1678.00	1 ⁺ ,2 ⁺	729.824	3 ⁺
956.74 6	0.53 3	1547.39	1 ⁺ ,2 ⁺ ,3 ⁺	590.75	4 ⁺
958.25 9	0.36 3	1344.012	1 ⁺	385.782	(1 ⁺)
^x 961.26 4	0.364 14				
972.108 18	1.94 3	1247.152	4 ⁻	275.030	3 ⁺
^x 976.27 3	0.349 11				
983.21 8	0.176 13	1713.20	(1 ⁺)	729.824	3 ⁺
987.18 3	0.522 15	2681.16	1 ⁺	1694.07	(1 ⁺)
993.48 17	0.087 11	2813.84	1 ⁻ ,2 ⁻	1820.352	1 ⁺

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${}^{65}\text{Cu}(n,\gamma)$ E=thermal 1983De29 (continued) $\gamma({}^{66}\text{Cu})$ (continued)

E_γ^\dagger	I_γ^\ddagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π
997.648& 18	1.46 3	1820.352	1 ⁺	822.691	2 ⁺
1006.19 6	0.229 14	1735.96	(4,5) ⁻	729.824	3 ⁺
^x 1014.07 7	0.231 11				
1017.1 3	0.086 13	2987.96		1971.18	2 ⁻
^x 1019.46 5	0.404 15				
^x 1026.67 7	0.190 12				
1042.86@ 11	0.30 3	3208.95		2166.01	+
1052.19 3	1.99 7	1052.082	1 ⁺	0.0	1 ⁺
1053.88 20	0.31 6	2799.85	(2) ⁻	1745.89	(1,2)
1081.95 12	0.120 11	2629.29	3 ⁺ ,4 ⁺	1547.39	1 ⁺ ,2 ⁺ ,3 ⁺
1088.64@ 10	0.142 10	1911.31		822.691	2 ⁺
1115.48 23	0.099 16	3636.56	1 ⁻ ,2 ⁻	2520.77	2 ⁻ ,3 ⁻ ,4 ⁻
1120.8 4	0.057 15	3750.30		2629.29	3 ⁺ ,4 ⁺
^x 1135.78 19	0.075 11				
1139.65@ 4	0.404 14	3110.86		1971.18	2 ⁻
1146.79 7	0.195 12	2586.27		1439.408	(1 ⁺ ,2,3 ⁺)
1161.63 16	0.112 12	1547.39	1 ⁺ ,2 ⁺ ,3 ⁺	385.782	(1 ⁺)
^x 1164.71 10	0.166 12				
1180.8 3	0.041 11	1911.31		729.824	3 ⁺
1197.21 7	0.71 3	1927.19	1 ⁺ ,2 ⁺	729.824	3 ⁺
1208.8 9	0.05 3	2260.66		1052.082	1 ⁺
1212.52 4	1.78 6	1212.515	1 ⁺ ,2 ⁺	0.0	1 ⁺
1220.4 6	0.10 4	2767.86	(1) ⁺	1547.39	1 ⁺ ,2 ⁺ ,3 ⁺
1253.28 8	0.184 11	2597.49		1344.012	1 ⁺
^x 1261.72 10	0.137 11				
1272.32 4	0.628 21	1547.39	1 ⁺ ,2 ⁺ ,3 ⁺	275.030	3 ⁺
1280.20 7	0.227 14	3026.09	(1 ⁻ ,2 ⁻)	1745.89	(1,2)
1288.63 21	0.076 13	2018.36	1 ⁺ ,2 ⁺ ,3 ⁺	729.824	3 ⁺
1293.71 7	0.405 24	2023.315	(1,2)	729.824	3 ⁺
1298.87@ 6	0.50 3	3896.38	(2 ⁻)	2597.49	
1303.03 22	0.14 3	4116.41		2813.84	1 ⁻ ,2 ⁻
1313.29 17	0.133 17	2560.43	2 ⁻	1247.152	4 ⁻
1322.16 14	0.165 15	1560.15	+	237.822	
1343.4 8	0.034 19	1344.012	1 ⁺	0.0	1 ⁺
1355.18 4	2.25 9	1820.352	1 ⁺	465.165	2 ⁺
1374.41 14	0.241 21	2813.84	1 ⁻ ,2 ⁻	1439.408	(1 ⁺ ,2,3 ⁺)
1394.90@ 9	0.273 18	2739.16	2 ⁻ ,3 ⁻ ,4 ⁻	1344.012	1 ⁺
1401.26 21	0.074 13	2948.76	(1 ⁻ ,2 ⁻)	1547.39	1 ⁺ ,2 ⁺ ,3 ⁺
1408.4@ 3	0.045 10	3432.37		2023.315	(1,2)
1416.38 11	0.129 12	3780.19		2363.63	
1428.18 5	0.76 4	2586.27		1158.09	(2 ⁺ ,3)
^x 1435.26 19	0.219 25				
1439.37 3	1.88 7	1439.408	(1 ⁺ ,2,3 ⁺)	0.0	1 ⁺
1450.6 3	0.14 3	2503.00	(2 ⁺ ,3 ⁺)	1052.082	1 ⁺
1468.56 12	0.52 4	2681.16	1 ⁺	1212.515	1 ⁺ ,2 ⁺
1471.05 8	0.76 5	1745.89	(1,2)	275.030	3 ⁺
^x 1489.90 16	0.164 17				
1506.57@ 15	0.225 19	2664.44	1 ⁻ ,2 ⁻	1158.09	(2 ⁺ ,3)
1509.64 18	0.175 17	2948.76	(1 ⁻ ,2 ⁻)	1439.408	(1 ⁺ ,2,3 ⁺)
1515.3 4	0.054 17	3487.05	(2 ⁺ ,3 ⁺)	1971.18	2 ⁻
1523.0 4	0.054 13	2681.16	1 ⁺	1158.09	(2 ⁺ ,3)
^x 1532.4 3	0.070 17				
1553.1 3	0.39 7	2799.85	(2) ⁻	1247.152	4 ⁻
1557.4 7	0.42 16	2023.315	(1,2)	465.165	2 ⁺

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$^{65}\text{Cu}(n,\gamma)$ E=thermal 1983De29 (continued) $\gamma(^{66}\text{Cu})$ (continued)

E_γ †	I_γ ‡	$E_i(\text{level})$	J_i^π	E_f	J_f^π
1559.86 6	5.6 3	1745.89	(1,2)	185.953	2 ⁺
^x 1574.0 3	0.096 18				
1582.51 3	1.60 7	1820.352	1 ⁺	237.822	
1589.79 20	0.119 17	5077.21		3487.05	(2 ⁺ ,3 ⁺)
1607.34 @ 18	0.107 14	4056.98	(1,2) ⁻	2449.19	
1629.2 3	0.18 3	2681.16	1 ⁺	1052.082	1 ⁺
1633.89 6	1.09 6	2363.63		729.824	3 ⁺
1637.49 4	2.37 11	2023.315	(1,2)	385.782	(1 ⁺)
1647.33 7	0.390 24	2664.44	1 ⁻ ,2 ⁻	1017.138	3 ⁺
1652.01 6	0.53 3	3091.37	(1 ⁻ ,2 ⁻)	1439.408	(1 ⁺ ,2 ⁺ ,3 ⁺)
^x 1658.91 10	0.231 18				
1666.15 13	0.173 17	3010.18	3 ⁺ ,4 ⁺ ,5 ⁺	1344.012	1 ⁺
1670.32 11	0.211 17	3247.83		1577.34	1 ⁺ ,2 ⁺ ,3 ⁺
1678.19 @ 4	0.78 4	1678.00	1 ⁺ ,2 ⁺	0.0	1 ⁺
1682.00 17	0.143 14	3705.08	2 ⁻ ,3 ⁻ ,4 ⁻	2023.315	(1,2)
1723.07 12	0.167 14	2453.05	(1 ⁺ ,2 ⁺ ,3 ⁺)	729.824	3 ⁺
1728.01 @ 6	0.441 24	4527.91	(1,2) ⁻	2799.85	(2) ⁻
1732.27 @ 17	0.127 15	3750.30		2018.36	1 ⁺ ,2 ⁺ ,3 ⁺
1743.40 5	2.34 12	2018.36	1 ⁺ ,2 ⁺ ,3 ⁺	275.030	3 ⁺
1746.2 @ 3	1.08 17	1745.89	(1,2)	0.0	1 ⁺
1748.0 3	0.59 20	2023.315	(1,2)	275.030	3 ⁺
1761.6 6	0.064 23	2813.84	1 ⁻ ,2 ⁻	1052.082	1 ⁺
1773.5 3	0.109 20	4850.76		3077.29	(1 ⁻ ,2 ⁻)
1799.84 @ 14	0.137 13	3535.49		1735.96	(4,5) ⁻
1806.57 @ 17	0.108 13	2629.29	3 ⁺ ,4 ⁺	822.691	2 ⁺
1820.21 6	0.93 5	1820.352	1 ⁺	0.0	1 ⁺
1832.39 @ 3	1.22 6	2018.36	1 ⁺ ,2 ⁺ ,3 ⁺	185.953	2 ⁺
1837.44 4	0.71 4	2023.315	(1,2)	185.953	2 ⁺
1843.71 14	0.145 15	3814.66	1 ⁻ ,2 ⁻	1971.18	2 ⁻
1849.4 3	0.18 3	2124.09	2 ⁻	275.030	3 ⁺
1854.3 4	0.054 14	3601.00		1745.89	(1,2)
^x 1866.68 3	0.95 5				
1874.41 @ 20	0.083 12	2260.66		385.782	(1 ⁺)
1890.61 18	0.140 16	3636.56	1 ⁻ ,2 ⁻	1745.89	(1,2)
1901.52 16	0.152 17	2953.35	(1,2) ⁻	1052.082	1 ⁺
1912.13 @ 17	0.139 14	2503.00	(2 ⁺ ,3 ⁺)	590.75	4 ⁺
1916.35 22	0.104 13	3934.58	(1 ⁻ ,2 ⁻)	2018.36	1 ⁺ ,2 ⁺ ,3 ⁺
1929.63 22	0.158 20	2520.77	2 ⁻ ,3 ⁻ ,4 ⁻	590.75	4 ⁺
^x 1939.87 12	0.36 3				
1944.97 24	0.19 3	2767.86	(1) ⁺	822.691	2 ⁺
1966.29 @ 11	0.194 17	5077.21		3110.86	
1975.26 @ 12	0.187 16	3535.49		1560.15	+
1980.01 8	0.338 23	2166.01	+	185.953	2 ⁺
1985.73 14	0.236 22	2260.66		275.030	3 ⁺
1988.92 @ 10	0.36 3	7066.22	1 ⁻ ,2 ⁻	5077.21	
2004.42 @ 10	0.246 21	3750.30		1745.89	(1,2)
2023.55 6	0.47 3	3601.00		1577.34	1 ⁺ ,2 ⁺ ,3 ⁺
2039.33 25	0.083 14	3091.37	(1 ⁻ ,2 ⁻)	1052.082	1 ⁺
^x 2046.00 15	0.143 17				
2059.9 3	0.067 12	3077.29	(1 ⁻ ,2 ⁻)	1017.138	3 ⁺
^x 2068.26 14	0.149 16				
2082.6 3	0.071 16	3099.08	(2 ⁺ ,3 ⁺ ,4 ⁺)	1017.138	3 ⁺

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$^{65}\text{Cu}(n,\gamma)$ E=thermal 1983De29 (continued) $\gamma(^{66}\text{Cu})$ (continued)

E_γ †	I_γ ‡	E_i (level)	J_i^π	E_f	J_f^π
$^{x}2091.36$ 10	0.294 22				
2095.76 13	0.205 18	3535.49		1439.408	(1 ⁺ ,2,3 ⁺)
$^{x}2110.44$ 6	0.61 4				
2114.78 20	0.159 19	2844.72	1 ⁻ ,2 ⁻	729.824	3 ⁺
2120.25 25	0.146 19	2394.93		275.030	3 ⁺
2123.95 19	0.161 17	2124.09	2 ⁻	0.0	1 ⁺
2131.25 @ 22	0.114 18	2953.35	(1,2) ⁻	822.691	2 ⁺
2144.22 24	0.186 23	3583.53		1439.408	(1 ⁺ ,2,3 ⁺)
$^{x}2147.27$ 25	0.202 24				
$^{x}2151.31$ 11	0.265 21				
2160.4 @ 3	0.130 22	3896.38	(2 ⁻)	1735.96	(4,5) ⁻
2163.22 @ 11	0.40 3	2163.12	-	0.0	1 ⁺
2177.87 15	0.164 17	2453.05	(1 ⁺ ,2,3 ⁺)	275.030	3 ⁺
2215.88 17	1.63 20	7066.22	1 ⁻ ,2 ⁻	4850.76	
2254.5 9	0.09 5	3077.29	(1 ⁻ ,2 ⁻)	822.691	2 ⁺
$^{x}2278.2$ 3	0.071 13				
2315.7 3	0.21 4	3045.95	(1 ⁻ ,2 ⁻)	729.824	3 ⁺
2371.4 4	0.13 4	3583.53		1212.515	1 ⁺ ,2 ⁺
2380.34 18	0.21 3	3432.37		1052.082	1 ⁺
2389.3 4	0.100 23	2664.44	1 ⁻ ,2 ⁻	275.030	3 ⁺
2400.0 @ 3	0.16 3	2586.27		185.953	2 ⁺
2402.83 24	0.22 3	2867.69	0 ⁺ ,1 ⁺	465.165	2 ⁺
2411.58 12	0.36 3	2597.49		185.953	2 ⁺
2423.94 18	0.191 22	3636.56	1 ⁻ ,2 ⁻	1212.515	1 ⁺ ,2 ⁺
2436.7 4	0.13 3	3165.77	(1,2,3) ⁺	729.824	3 ⁺
$^{x}2439.35$ 14	0.42 4				
2448.7 4	0.15 4	2449.19		0.0	1 ⁺
2450.91 @ 23	0.29 5	2688.22	(1 ⁺)	237.822	
2457.66 18	0.183 21	3705.08	2 ⁻ ,3 ⁻ ,4 ⁻	1247.152	4 ⁻
2478.2 5	0.17 5	3487.05	(2 ⁺ ,3 ⁺)	1008.49	
2488.4 @ 4	0.24 5	2953.35	(1,2) ⁻	465.165	2 ⁺
2492.0 8	0.11 5	3508.84	(2 ⁺ ,3,4 ⁺)	1017.138	3 ⁺
2508.3 7	0.11 5	3099.08	(2 ⁺ ,3,4 ⁺)	590.75	4 ⁺
2539.3 6	0.07 3	7066.22	1 ⁻ ,2 ⁻	4527.91	(1,2) ⁻
2545.2 @ 5	0.08 3	3010.18	3 ⁺ ,4 ⁺ ,5 ⁺	465.165	2 ⁺
2553.1 3	0.15 3	2739.16	2 ⁻ ,3 ⁻ ,4 ⁻	185.953	2 ⁺
2557.8 5	0.093 25	2943.33	(1 ⁻ ,2 ⁻)	385.782	(1 ⁺)
2561.3 6	0.068 24	2560.43	2 ⁻	0.0	1 ⁺
2569.26 21	0.176 23	2844.72	1 ⁻ ,2 ⁻	275.030	3 ⁺
2584.3 4	0.090 22	3636.56	1 ⁻ ,2 ⁻	1052.082	1 ⁺
2603.3 3	0.23 4	7066.22	1 ⁻ ,2 ⁻	4462.70	(1,2) ⁻
2608.5 @ 3	0.26 4	2608.50		0.0	1 ⁺
2612.1 4	0.27 4	3077.29	(1 ⁻ ,2 ⁻)	465.165	2 ⁺
2615.2 8	0.12 4	2799.85	(2) ⁻	185.953	2 ⁺
2619.14 @ 24	0.28 4	3636.56	1 ⁻ ,2 ⁻	1017.138	3 ⁺
2629.61 12	0.71 5	2867.69	0 ⁺ ,1 ⁺	237.822	
2641.3 3	0.20 4	3371.23		729.824	3 ⁺
2664.17 16	0.34 3	2664.44	1 ⁻ ,2 ⁻	0.0	1 ⁺
2673.42 @ 16	0.32 3	2948.76	(1 ⁻ ,2 ⁻)	275.030	3 ⁺
2680.38 @ 13	0.48 3	2681.16	1 ⁺	0.0	1 ⁺
2687.88 12	0.52 3	2688.22	(1 ⁺)	0.0	1 ⁺
2700.26 @ 10	0.72 4	3165.77	(1,2,3) ⁺	465.165	2 ⁺
2708.2 @ 4	0.13 3	4527.91	(1,2) ⁻	1820.352	1 ⁺

Continued on next page (footnotes at end of table)

$^{65}\text{Cu}(n,\gamma)$ E=thermal 1983De29 (continued) $\gamma(^{66}\text{Cu})$ (continued)

E_γ^\dagger	I_γ^\ddagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π
2713.3 5	0.10 3	3099.08	(2 ⁺ ,3,4 ⁺)	385.782	(1 ⁺)
2758.8 @ 5	0.15 4	2943.33	(1 ⁻ ,2 ⁻)	185.953	2 ⁺
2766.2 5	0.12 4	7066.22	1 ⁻ ,2 ⁻	4300.2	
2770.7 8	0.08 3	3045.95	(1 ⁻ ,2 ⁻)	275.030	3 ⁺
^x 2781.5 5	0.10 3				
2806.9 3	0.14 3	3397.63		590.75	4 ⁺
2821.76 @ 13	0.73 5	3287.36	+	465.165	2 ⁺
2824.8 6	0.12 4	3010.18	3 ⁺ ,4 ⁺ ,5 ⁺	185.953	2 ⁺
^x 2856.36 16	0.263 23				
2862.63 @ 13	0.44 3	3048.82		185.953	2 ⁺
2866.61 @ 15	0.39 3	3141.74		275.030	3 ⁺
2870.7 5	0.078 20	3601.00		729.824	3 ⁺
2876.19 21	0.171 20	3151.97		275.030	3 ⁺
2890.6 3	0.125 20	3077.29	(1 ⁻ ,2 ⁻)	185.953	2 ⁺
2896.9 @ 4	0.087 20	3487.05	(2 ⁺ ,3 ⁺)	590.75	4 ⁺
2901.2 @ 3	0.119 21	3287.36	+	385.782	(1 ⁺)
2912.57 @ 18	0.158 16	3099.08	(2 ⁺ ,3,4 ⁺)	185.953	2 ⁺
2918.0 4	0.065 14	3508.84	(2 ⁺ ,3,4 ⁺)	590.75	4 ⁺
^x 2935.05 13	0.254 18				
2949.5 # 4	0.19 3	7066.22	1 ⁻ ,2 ⁻	4116.41	
2952.64 21	0.33 4	2953.35	(1,2) ⁻	0.0	1 ⁺
2968.8 @ 4	0.112 24	4527.91	(1,2) ⁻	1560.15	+
2986.9 6	0.074 24	2987.96		0.0	1 ⁺
2991.1 @ 4	0.120 25	3814.66	1 ⁻ ,2 ⁻	822.691	2 ⁺
2996.78 @ 16	0.33 3	4013.69	(1 ⁺ ,2,3 ⁺)	1017.138	3 ⁺
3009.32 @ 13	0.297 21	7066.22	1 ⁻ ,2 ⁻	4056.98	(1,2) ⁻
3021.72 @ 21	0.216 22	3487.05	(2 ⁺ ,3 ⁺)	465.165	2 ⁺
3025.77 @ 12	0.47 3	3026.09	(1 ⁻ ,2 ⁻)	0.0	1 ⁺
3045.46 23	0.23 3	3636.56	1 ⁻ ,2 ⁻	590.75	4 ⁺
3052.91 19	0.230 23	7066.22	1 ⁻ ,2 ⁻	4013.69	(1 ⁺ ,2,3 ⁺)
3067.2 @ 3	0.16 3	3342.06		275.030	3 ⁺
^x 3071.8 4	0.13 3				
3090.95 @ 25	0.161 23	3091.37	(1 ⁻ ,2 ⁻)	0.0	1 ⁺
3111.4 4	0.096 24	3110.86		0.0	1 ⁺
3121.3 @ 5	0.11 3	3397.63		275.030	3 ⁺
3131.70 # @ 25	0.173 23	7066.22	1 ⁻ ,2 ⁻	3934.58	(1 ⁻ ,2 ⁻)
3137.18 @ 17	0.30 3	4850.76		1713.20	(1 ⁺)
3165.8 3	0.21 3	3165.77	(1,2,3) ⁺	0.0	1 ⁺
3169.4 # @ 4	0.20 3	7066.22	1 ⁻ ,2 ⁻	3896.38	(2 ⁻)
3172.95 @ 11	0.73 4	4850.76		1678.00	1 ⁺ ,2 ⁺
^x 3184.49 9	0.81 3				
3208.1 @ 3	0.110 20	3208.95		0.0	1 ⁺
^x 3225.8 5	0.076 20				
^x 3230.1 7	0.057 19				
3241.9 @ 4	0.14 3	3479.48		237.822	
3251.26 # 24	0.24 3	7066.22	1 ⁻ ,2 ⁻	3814.66	1 ⁻ ,2 ⁻
3270.78 @ 14	0.57 4	3508.84	(2 ⁺ ,3,4 ⁺)	237.822	
3275.2 @ 7	0.08 3	4850.76		1577.34	1 ⁺ ,2 ⁺ ,3 ⁺
3285.85 @ 18	0.33 3	7066.22	1 ⁻ ,2 ⁻	3780.19	

Continued on next page (footnotes at end of table)

$^{65}\text{Cu}(n,\gamma)$ E=thermal 1983De29 (continued) $\gamma(^{66}\text{Cu})$ (continued)

E_γ^\dagger	I_γ^\ddagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π
3293.49 11	0.72 4	4116.41		822.691	2 ⁺
3307.4 @ 6	0.11 3	3583.53		275.030	3 ⁺
3316.04 @ 18	0.33 3	7066.22	1 ⁻ ,2 ⁻	3750.30	
3322.2 @ 6	0.08 3	3508.84	(2 ⁺ ,3,4 ⁺)	185.953	2 ⁺
^x 3327.2 6	0.08 3				
3348.5 @ 3	0.113 14	3814.66	1 ⁻ ,2 ⁻	465.165	2 ⁺
3361.11 18	0.152 15	7066.22	1 ⁻ ,2 ⁻	3705.08	2 ⁻ ,3 ⁻ ,4 ⁻
3383.6 @ 3	0.124 20	5077.21		1694.07	(1) ⁺
^x 3402.63 18	0.240 23				
^x 3424.85 17	0.225 18				
3429.40 9	1.05 3	7066.22	1 ⁻ ,2 ⁻	3636.56	1 ⁻ ,2 ⁻
3450.3 @ 3	0.093 16	3636.56	1 ⁻ ,2 ⁻	185.953	2 ⁺
^x 3456.2 4	0.063 16				
3465.00 @ 10	0.64 3	7066.22	1 ⁻ ,2 ⁻	3601.00	
3476.9 5	0.078 18	4300.2		822.691	2 ⁺
3482.51 @ 17	0.33 3	7066.22	1 ⁻ ,2 ⁻	3583.53	
3486.2 @ 6	0.076 22	3487.05	(2 ⁺ ,3 ⁺)	0.0	1 ⁺
3530.56 @ 10	0.71 3	7066.22	1 ⁻ ,2 ⁻	3535.49	
3548.6 @ 3	0.128 18	3934.58	(1 ⁻ ,2 ⁻)	385.782	(1) ⁺
3556.99 @ 18	0.42 4	7066.22	1 ⁻ ,2 ⁻	3508.84	(2 ⁺ ,3,4 ⁺)
^x 3560.1 3	0.28 3				
3563.7 @ 4	0.120 23	3750.30		185.953	2 ⁺
3578.0 # @ 3	0.116 18	7066.22	1 ⁻ ,2 ⁻	3487.05	(2 ⁺ ,3 ⁺)
3586.2 # @ 5	0.075 18	7066.22	1 ⁻ ,2 ⁻	3479.48	
^x 3606.6 3	0.115 16				
^x 3613.8 3	0.135 20				
3627.9 3	0.107 15	4013.69	(1 ⁺ ,2,3 ⁺)	385.782	(1) ⁺
3633.54 @ 22	0.142 15	7066.22	1 ⁻ ,2 ⁻	3432.37	
3668.23 @ 25	0.093 13	7066.22	1 ⁻ ,2 ⁻	3397.63	
^x 3687.2 3	0.073 11				
3695.05 # @ 17	0.146 13	7066.22	1 ⁻ ,2 ⁻	3371.23	
3724.08 @ 11	0.470 25	7066.22	1 ⁻ ,2 ⁻	3342.06	
3732.12 # 19	0.245 21	7066.22	1 ⁻ ,2 ⁻	3333.77	+
^x 3736.53 19	0.248 21				
^x 3743.9 5	0.061 7				
^x 3760.0 5	0.055 14				
^x 3772.25 25	0.121 15				
3778.38 @ 12	0.482 22	7066.22	1 ⁻ ,2 ⁻	3287.36	+
3782.18 @ 17	0.281 20	4056.98	(1,2) ⁻	275.030	3 ⁺
^x 3788.97 14	0.283 17				
^x 3794.16 18	0.192 16				
3814.2 @ 4	0.065 13	3814.66	1 ⁻ ,2 ⁻	0.0	1 ⁺
3818.14 # @ 10	0.505 17	7066.22	1 ⁻ ,2 ⁻	3247.83	
3835.8 @ 5	0.038 10	4300.2		465.165	2 ⁺
3857.00 @ 10	0.418 17	7066.22	1 ⁻ ,2 ⁻	3208.95	
3871.04 @ 11	0.427 17	4056.98	(1,2) ⁻	185.953	2 ⁺
^x 3881.7 6	0.037 11				
^x 3891.7 5	0.056 12				
3896.3 @ 4	0.110 16	3896.38	(2 ⁻)	0.0	1 ⁺

Continued on next page (footnotes at end of table)

$^{65}\text{Cu}(n,\gamma)$ E=thermal 1983De29 (continued) $\gamma(^{66}\text{Cu})$ (continued)

E_γ^\dagger	I_γ^\ddagger	$E_i(\text{level})$	J_i^π	E_f	J_f^π
3900.18 @ 8	1.21 3	7066.22	1 ⁻ ,2 ⁻	3165.77	(1,2,3) ⁺
3914.0 # @ 3	0.066 12	7066.22	1 ⁻ ,2 ⁻	3151.97	
3923.8 # @ 6	0.037 11	7066.22	1 ⁻ ,2 ⁻	3141.74	
3955.1 # @ 4	0.097 21	7066.22	1 ⁻ ,2 ⁻	3110.86	
3966.99 @ 12	0.428 22	7066.22	1 ⁻ ,2 ⁻	3099.08	(2 ⁺ ,3,4 ⁺)
3974.97 @ 13	0.391 21	7066.22	1 ⁻ ,2 ⁻	3091.37	(1 ⁻ ,2 ⁻)
3988.21 @ 25	0.129 16	7066.22	1 ⁻ ,2 ⁻	3077.29	(1 ⁻ ,2 ⁻)
^x 4000.15 17	0.222 17				
4016.95 @ 18	0.33 3	7066.22	1 ⁻ ,2 ⁻	3048.82	
4020.3 @ 6	0.099 23	7066.22	1 ⁻ ,2 ⁻	3045.95	(1 ⁻ ,2 ⁻)
4024.9 @ 7	0.046 16	4300.2		275.030	3 ⁺
4039.82 @ 11	0.75 3	7066.22	1 ⁻ ,2 ⁻	3026.09	(1 ⁻ ,2 ⁻)
4055.62 # 19	0.248 22	7066.22	1 ⁻ ,2 ⁻	3010.18	3 ⁺ ,4 ⁺ ,5 ⁺
4078.2 @ 3	0.134 18	7066.22	1 ⁻ ,2 ⁻	2987.96	
^x 4102.6 6	0.056 22				
^x 4109.7 15	0.04 3				
4113.25 19	0.62 4	7066.22	1 ⁻ ,2 ⁻	2953.35	(1,2) ⁻
4117.22 # @ 12	0.88 4	7066.22	1 ⁻ ,2 ⁻	2948.76	(1 ⁻ ,2 ⁻)
4122.91 @ 15	0.330 23	7066.22	1 ⁻ ,2 ⁻	2943.33	(1 ⁻ ,2 ⁻)
^x 4153.80 25	0.153 19				
^x 4167.3 8	0.036 15				
^x 4174.2 8	0.034 14				
4198.32 @ 9	1.09 3	7066.22	1 ⁻ ,2 ⁻	2867.69	0 ⁺ ,1 ⁺
4221.20 @ 12	0.350 17	7066.22	1 ⁻ ,2 ⁻	2844.72	1 ⁻ ,2 ⁻
^x 4243.7 6	0.036 13				
4251.95 # @ 20	0.128 14	7066.22	1 ⁻ ,2 ⁻	2813.84	1 ⁻ ,2 ⁻
4266.54 @ 24	0.115 12	7066.22	1 ⁻ ,2 ⁻	2799.85	(2) ⁻
^x 4271.7 4	0.088 13				
4276.58 @ 10	0.591 18	4462.70	(1,2) ⁻	185.953	2 ⁺
4298.14 @ 14	0.227 13	7066.22	1 ⁻ ,2 ⁻	2767.86	(1) ⁺
4326.66 @ 9	0.846 19	7066.22	1 ⁻ ,2 ⁻	2739.16	2 ⁻ ,3 ⁻ ,4 ⁻
4377.75 @ 10	0.77 3	7066.22	1 ⁻ ,2 ⁻	2688.22	(1) ⁺
4385.13 # @ 9	3.50 6	7066.22	1 ⁻ ,2 ⁻	2681.16	1 ⁺
4401.69 @ 10	1.03 3	7066.22	1 ⁻ ,2 ⁻	2664.44	1 ⁻ ,2 ⁻
4435.2 # @ 7	0.055 18	7066.22	1 ⁻ ,2 ⁻	2629.29	3 ⁺ ,4 ⁺
^x 4440.6 5	0.082 18				
4457.73 # @ 19	0.223 20	7066.22	1 ⁻ ,2 ⁻	2608.50	
4468.58 # @ 17	0.267 20	7066.22	1 ⁻ ,2 ⁻	2597.49	
4479.82 # @ 10	1.07 3	7066.22	1 ⁻ ,2 ⁻	2586.27	
4506.9 # @ 6	0.055 15	7066.22	1 ⁻ ,2 ⁻	2560.43	2 ⁻
4545.2 @ 4	0.044 9	7066.22	1 ⁻ ,2 ⁻	2520.77	2 ⁻ ,3 ⁻ ,4 ⁻
4562.96 # @ 11	0.335 12	7066.22	1 ⁻ ,2 ⁻	2503.00	(2 ⁺ ,3 ⁺)
^x 4572.4 5	0.051 10				
^x 4576.8 3	0.093 11				
4612.55 # 15	0.382 22	7066.22	1 ⁻ ,2 ⁻	2453.05	(1 ⁺ ,2,3 ⁺)
4617.8 # @ 3	0.172 18	7066.22	1 ⁻ ,2 ⁻	2449.19	
4671.20 @ 12	0.196 9	7066.22	1 ⁻ ,2 ⁻	2394.93	

Continued on next page (footnotes at end of table)

⁶⁵Cu(n,γ) E=thermal 1983De29 (continued)

γ(⁶⁶Cu) (continued)

<u>E_γ[†]</u>	<u>I_γ[‡]</u>	<u>E_i(level)</u>	<u>J_i^π</u>	<u>E_f</u>	<u>J_f^π</u>
^x 4699.0 5	0.044 9				
4703.4 @ 4	0.051 9	7066.22	1 ⁻ ,2 ⁻	2363.63	
^x 4795.39 11	0.289 10				
4805.30 # @ 12	0.232 9	7066.22	1 ⁻ ,2 ⁻	2260.66	
4900.15 @ 23	0.32 4	7066.22	1 ⁻ ,2 ⁻	2166.01	+
4903.09 # @ 13	0.77 4	7066.22	1 ⁻ ,2 ⁻	2163.12	-
4941.94 @ 12	0.372 17	7066.22	1 ⁻ ,2 ⁻	2124.09	2 ⁻
5043.00 # @ 9	5.86 11	7066.22	1 ⁻ ,2 ⁻	2023.315	(1,2)
5047.98 @ 10	3.50 9	7066.22	1 ⁻ ,2 ⁻	2018.36	1 ⁺ ,2 ⁺ ,3 ⁺
5138.98 # @ 21	0.263 25	7066.22	1 ⁻ ,2 ⁻	1927.19	1 ⁺ ,2 ⁺
5245.88 # @ & 9	7.30 14	7066.22	1 ⁻ ,2 ⁻	1820.352	1 ⁺
5320.23 # @ 9	6.15 13	7066.22	1 ⁻ ,2 ⁻	1745.89	(1,2)
5388.12 # @ 10	0.532 14	7066.22	1 ⁻ ,2 ⁻	1678.00	1 ⁺ ,2 ⁺
5488.65 # @ 18	0.093 7	7066.22	1 ⁻ ,2 ⁻	1577.34	1 ⁺ ,2 ⁺ ,3 ⁺
5505.56 # @ 18	0.095 7	7066.22	1 ⁻ ,2 ⁻	1560.15	+
5518.73 # @ 10	0.659 16	7066.22	1 ⁻ ,2 ⁻	1547.39	1 ⁺ ,2 ⁺ ,3 ⁺
5626.9 # @ 4	0.045 7	7066.22	1 ⁻ ,2 ⁻	1439.408	(1 ⁺ ,2,3 ⁺)
5722.03 # @ 10	0.383 9	7066.22	1 ⁻ ,2 ⁻	1344.012	1 ⁺
5853.41 # @ 10	1.112 18	7066.22	1 ⁻ ,2 ⁻	1212.515	1 ⁺ ,2 ⁺
5907.9 @ 4	0.035 6	7066.22	1 ⁻ ,2 ⁻	1158.09	(2 ⁺ ,3)
6013.46 # @ 18	0.120 7	7066.22	1 ⁻ ,2 ⁻	1052.082	1 ⁺
6048.84 # @ 10	1.71 3	7066.22	1 ⁻ ,2 ⁻	1017.138	3 ⁺
6243.19 # @ 10	2.44 4	7066.22	1 ⁻ ,2 ⁻	822.691	2 ⁺
6336.16 # @ 15	0.144 7	7066.22	1 ⁻ ,2 ⁻	729.824	3 ⁺
6600.66 # @ & 11	14.4 3	7066.22	1 ⁻ ,2 ⁻	465.165	2 ⁺
6680.01 # @ & 11	13.80 23	7066.22	1 ⁻ ,2 ⁻	385.782	(1 ⁺)
6790.64 # @ 11	2.63 4	7066.22	1 ⁻ ,2 ⁻	275.030	3 ⁺
6828.1 @ 8	0.022 7	7066.22	1 ⁻ ,2 ⁻	237.822	
6879.82 # @ 12	0.351 9	7066.22	1 ⁻ ,2 ⁻	185.953	2 ⁺
7065.72 # @ 11	2.23 4	7066.22	1 ⁻ ,2 ⁻	0.0	1 ⁺

[†] From 1983De29.

[‡] From 1983De29; these authors give absolute intensities (per 100 neutrons captured) by imposing the condition ΣI_γE_γ=100Q where Q=7065.97 11 and the sum is over all observed γ rays, placed or unplaced in the level scheme.

Transition seen also in the 2⁻ and/or 24-keV capture spectra.

@ Based on level energies, placement of this transition is the only possible one in the level scheme of 1983De29.

& Placement of this transition also reported from coincidence experiments in 1968Sh01 and 1972B116.

^x γ ray not placed in level scheme.

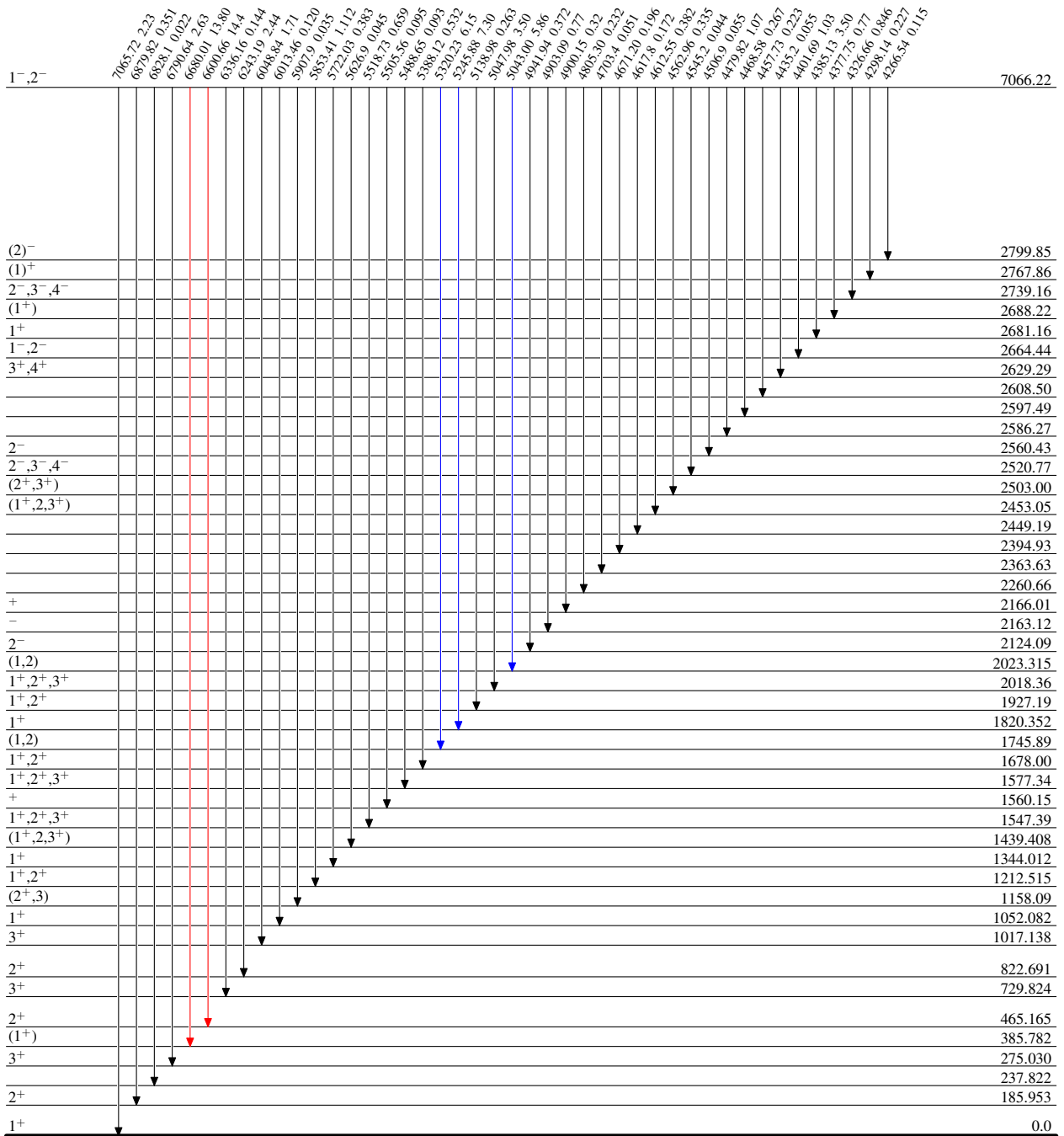
⁶⁵Cu(n,γ) E=thermal 1983De29

Legend

Level Scheme

Intensities: Relative I_γ

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



⁶⁶Cu₃₇

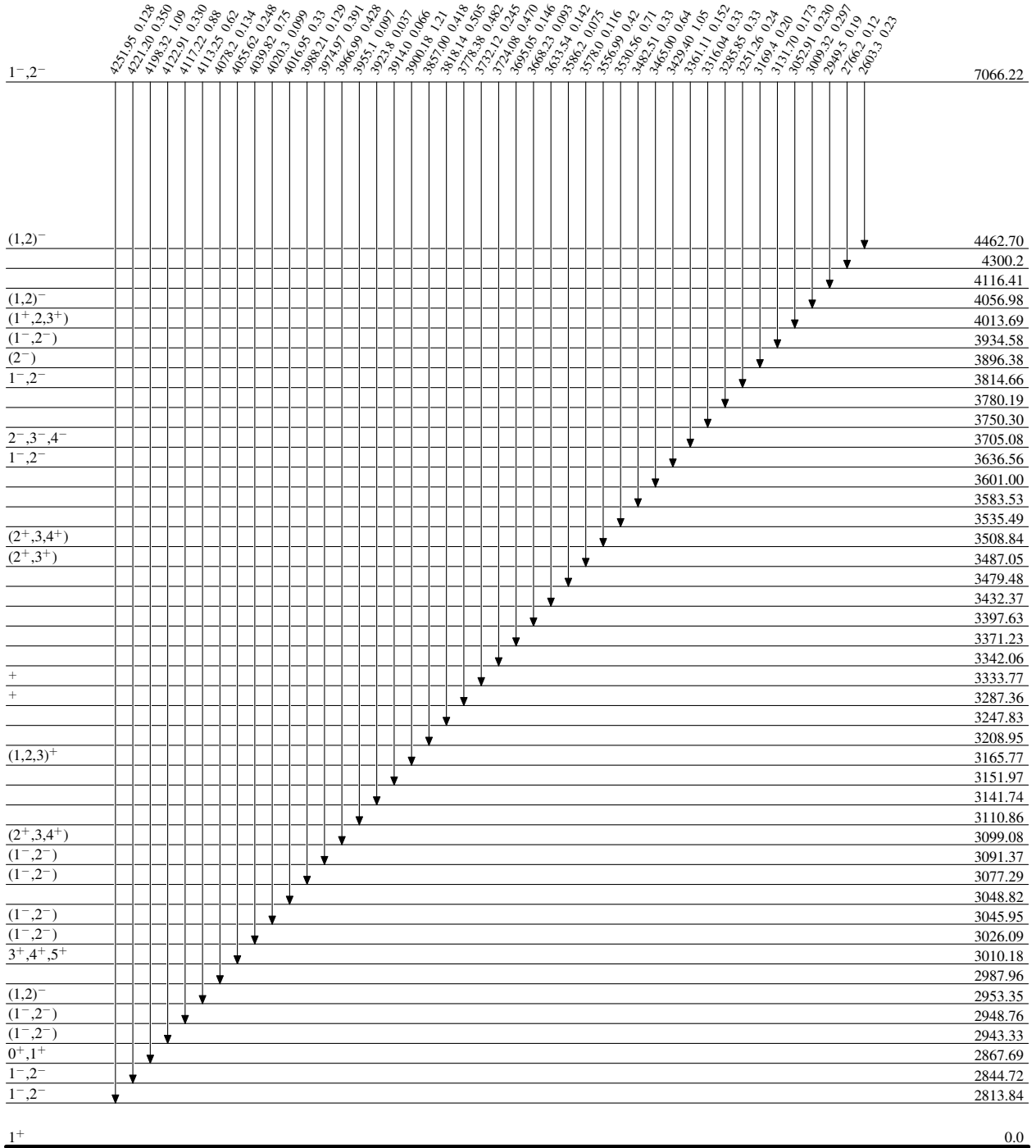
⁶⁵Cu(n,γ) E=thermal 1983De29

Level Scheme (continued)

Intensities: Relative I_γ

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



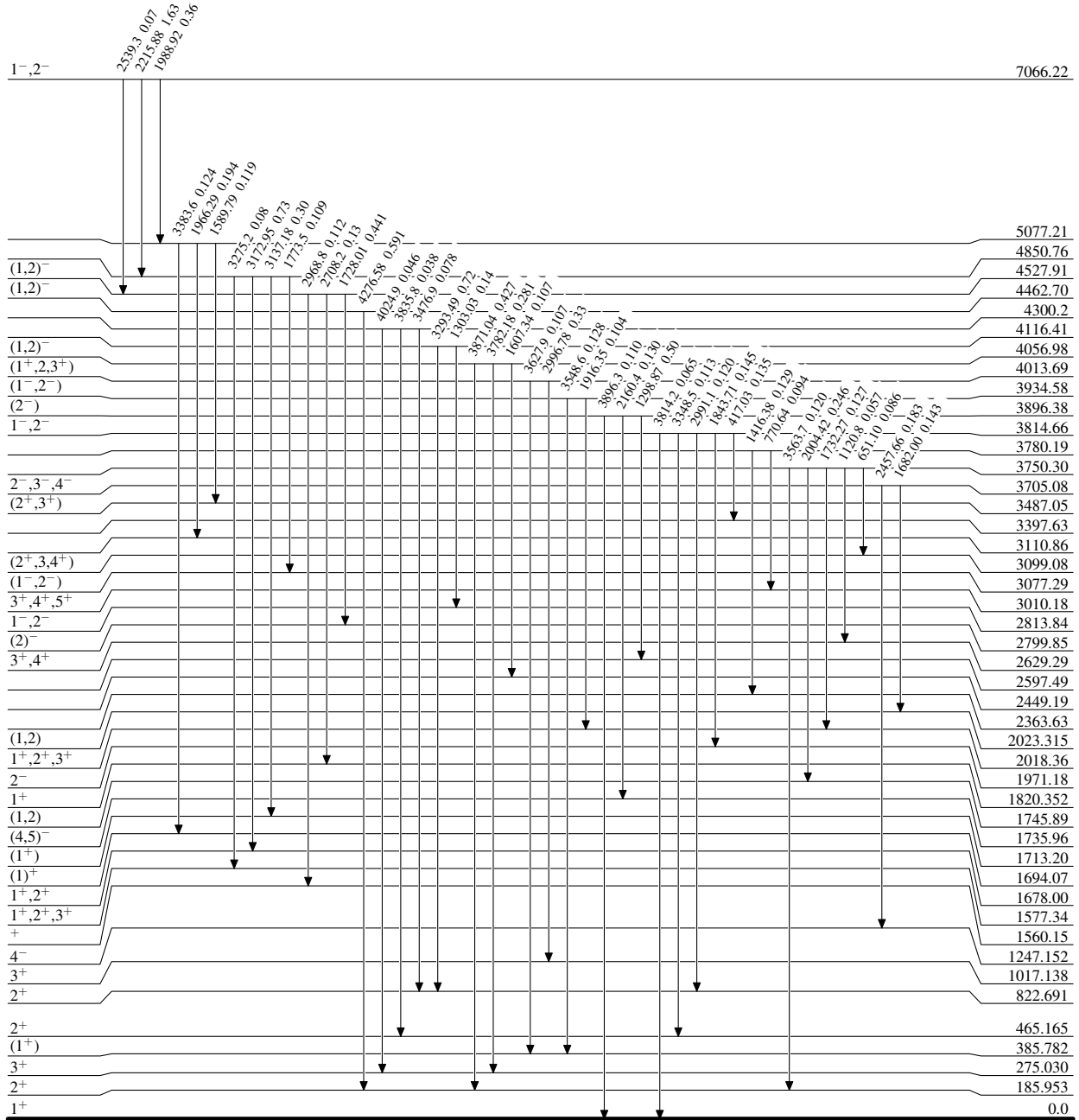
⁶⁵Cu(n,γ) E=thermal 1983De29

Level Scheme (continued)

Intensities: Relative I_γ

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



⁶⁶Cu₃₇

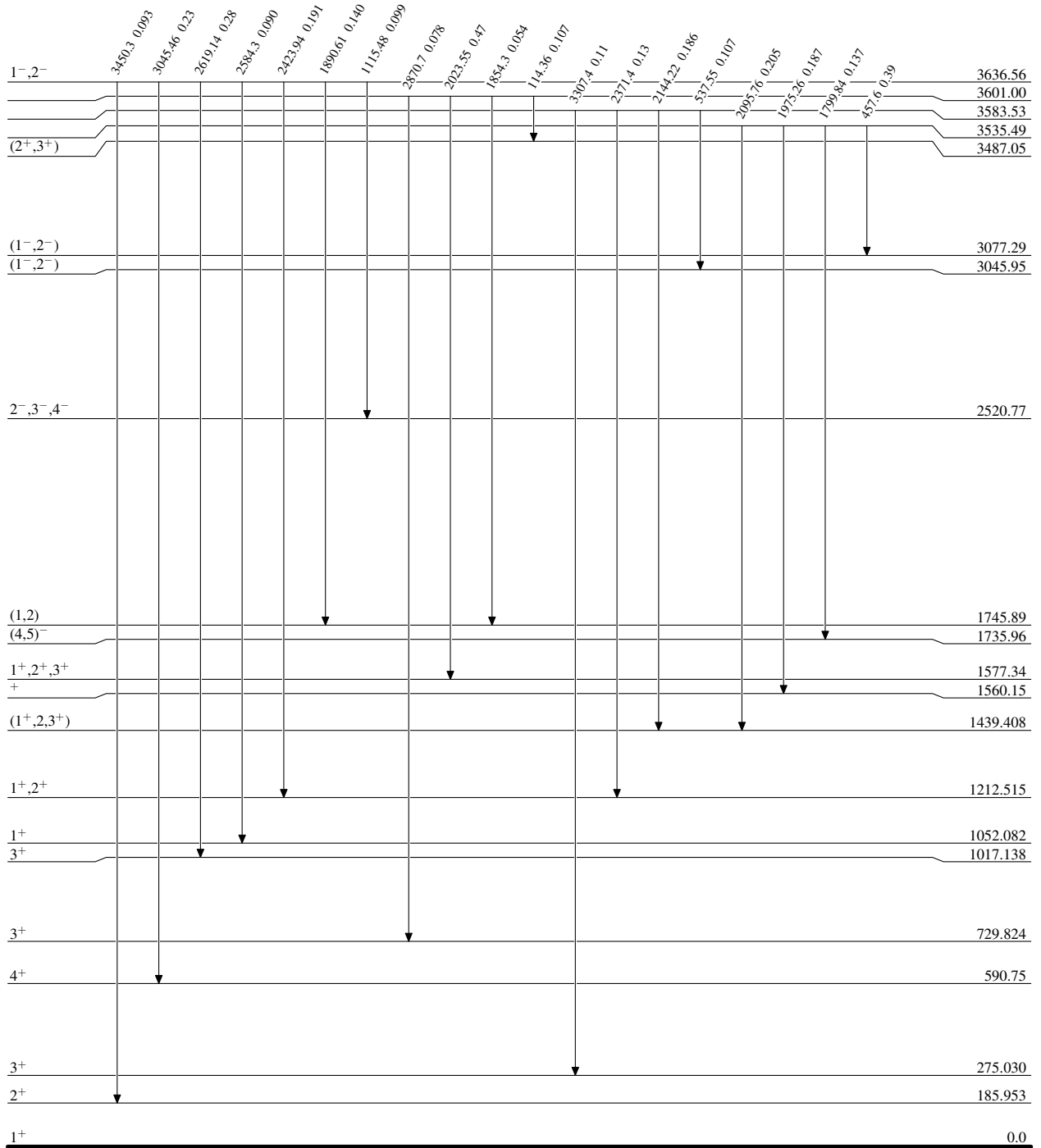
⁶⁵Cu(n,γ) E=thermal 1983De29

Level Scheme (continued)

Intensities: Relative I_γ

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



⁶⁶Cu₃₇

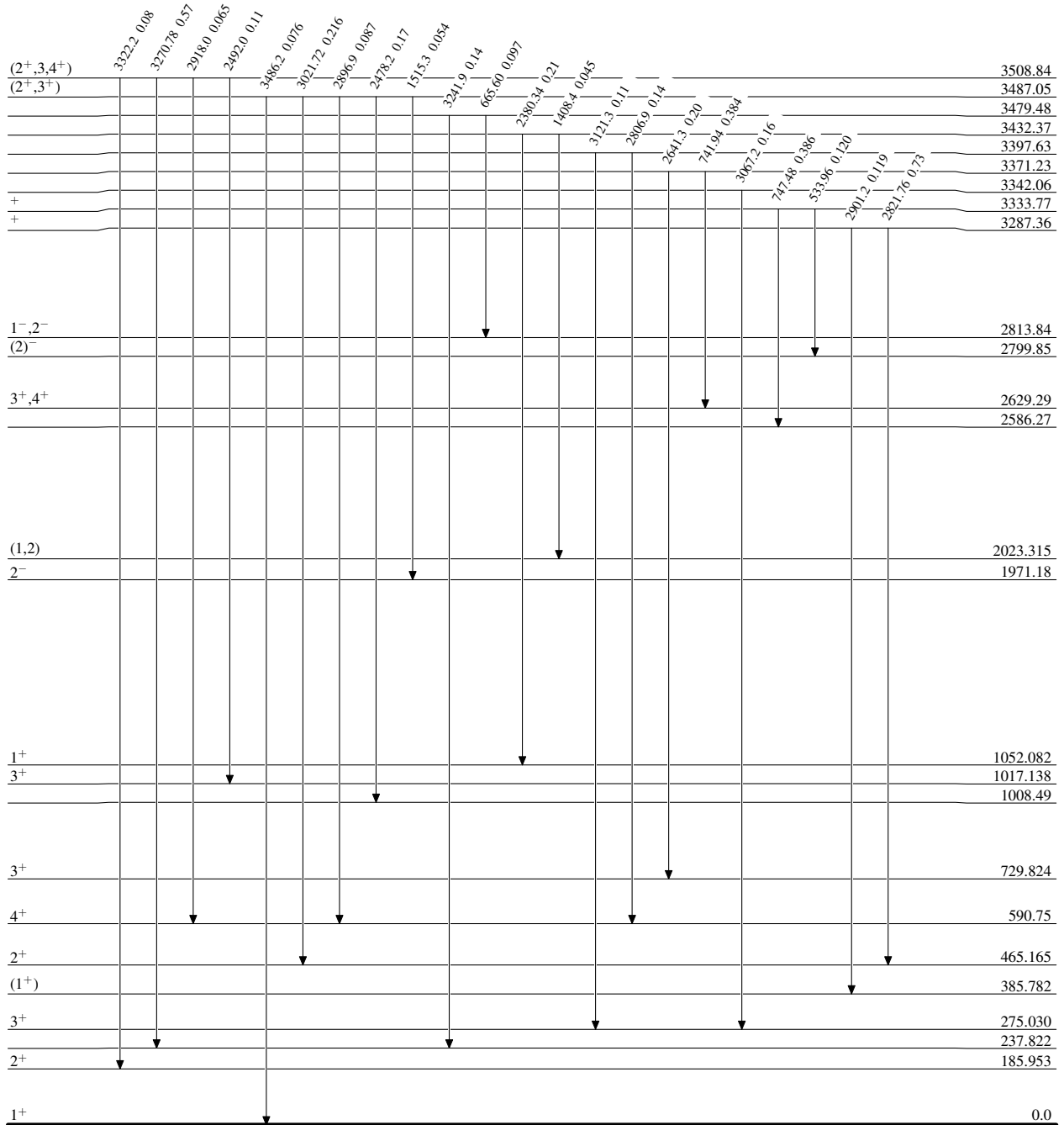
⁶⁵Cu(n,γ) E=thermal 1983De29

Level Scheme (continued)

Intensities: Relative I_γ

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



⁶⁶Cu₃₇

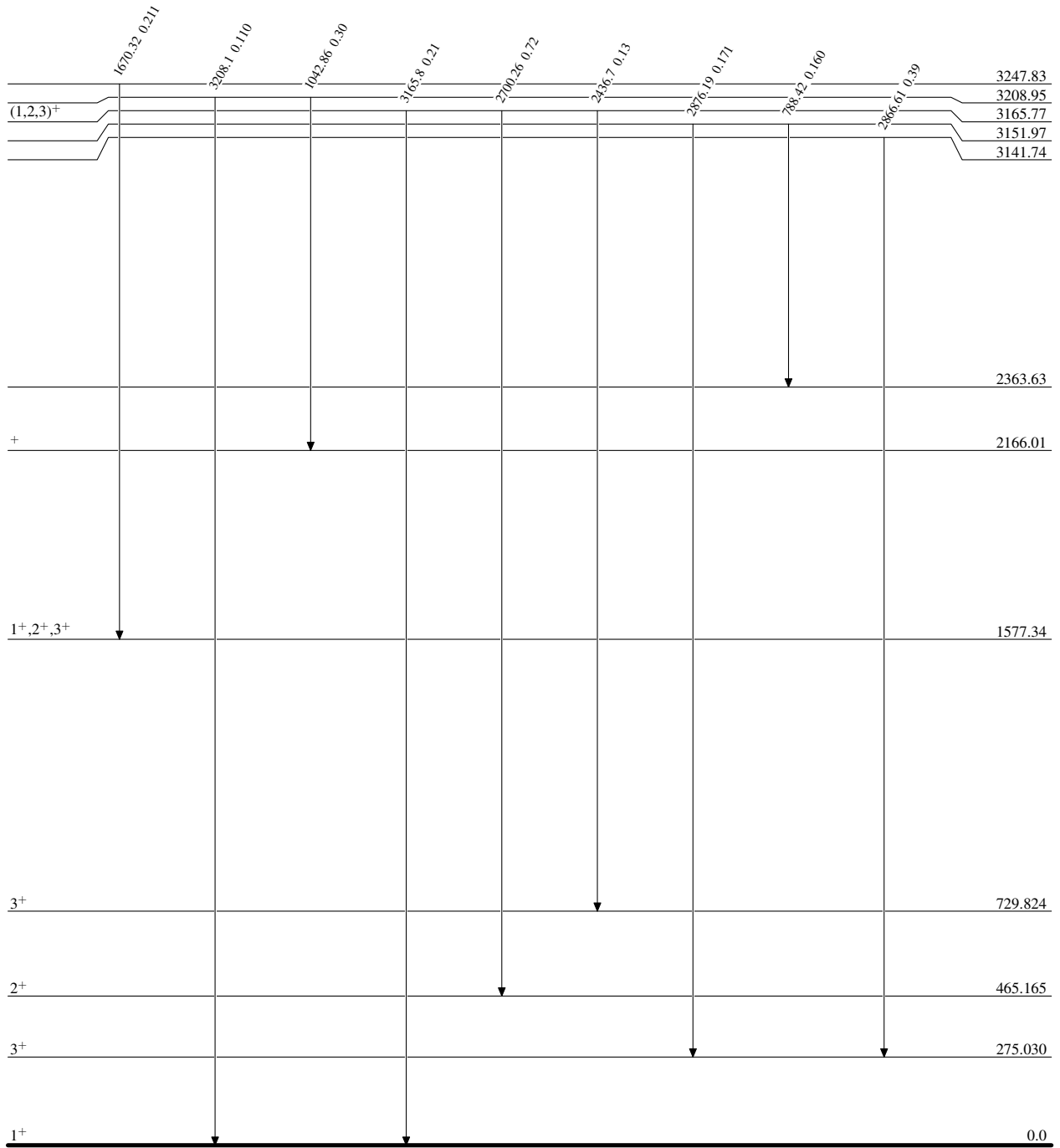
$^{65}\text{Cu}(n,\gamma)\text{E=thermal}$ 1983De29

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



$^{66}_{29}\text{Cu}_{37}$

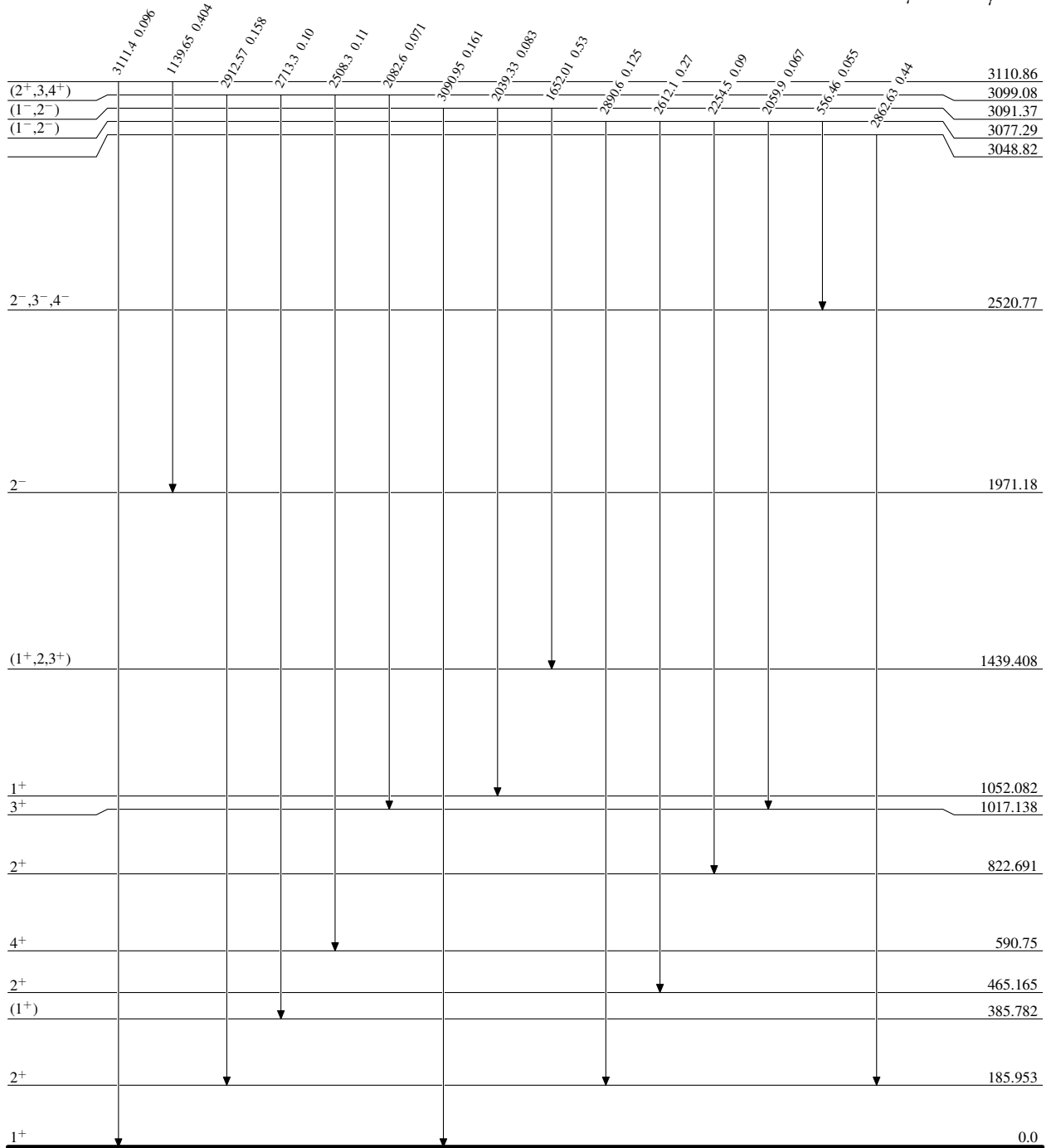
$^{65}\text{Cu}(n,\gamma) \text{E=thermal}$ 1983De29

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



$^{66}_{29}\text{Cu}_{37}$

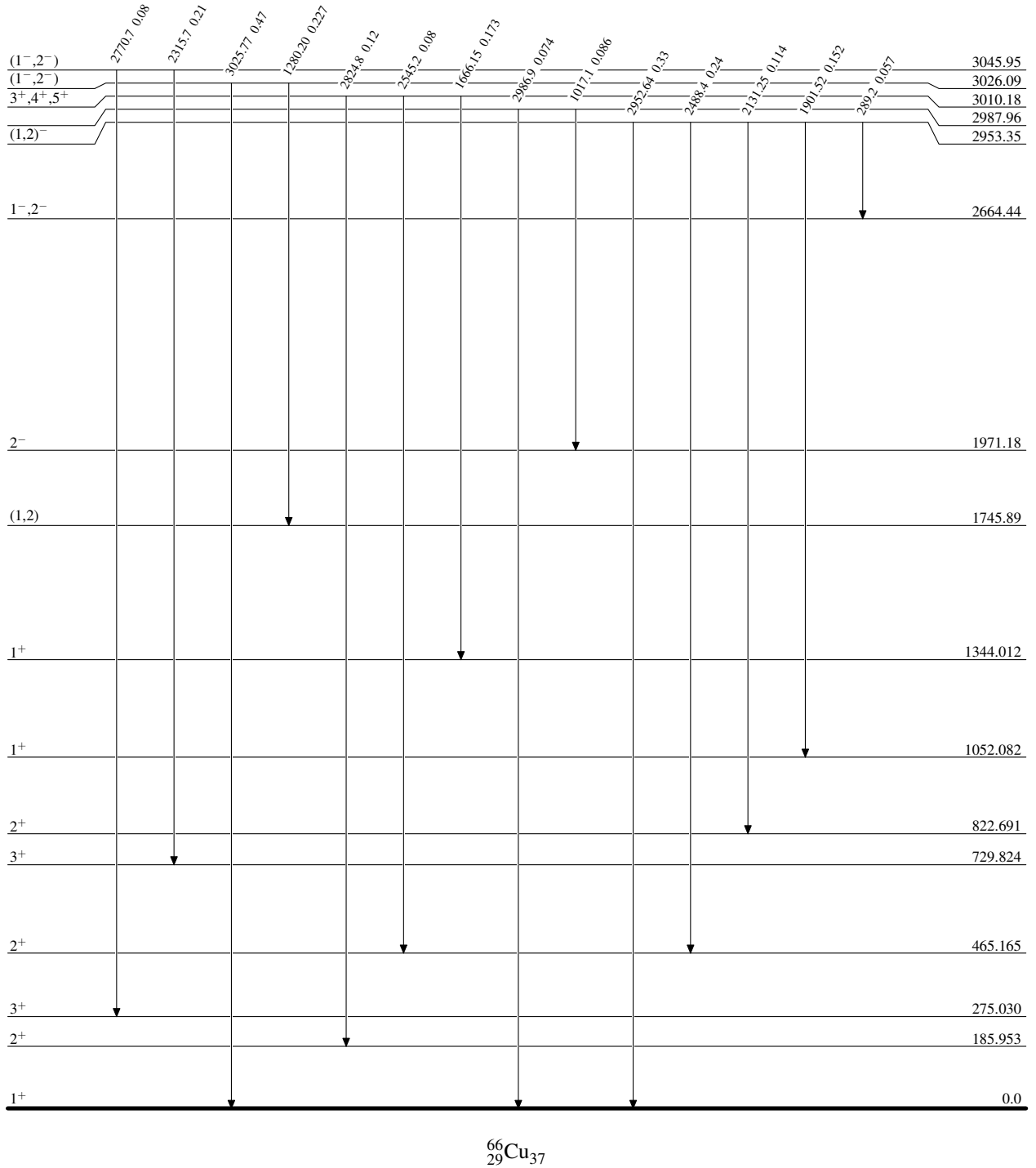
⁶⁵Cu(n,γ) E=thermal 1983De29

Level Scheme (continued)

Intensities: Relative I_γ

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



⁶⁶Cu₃₇

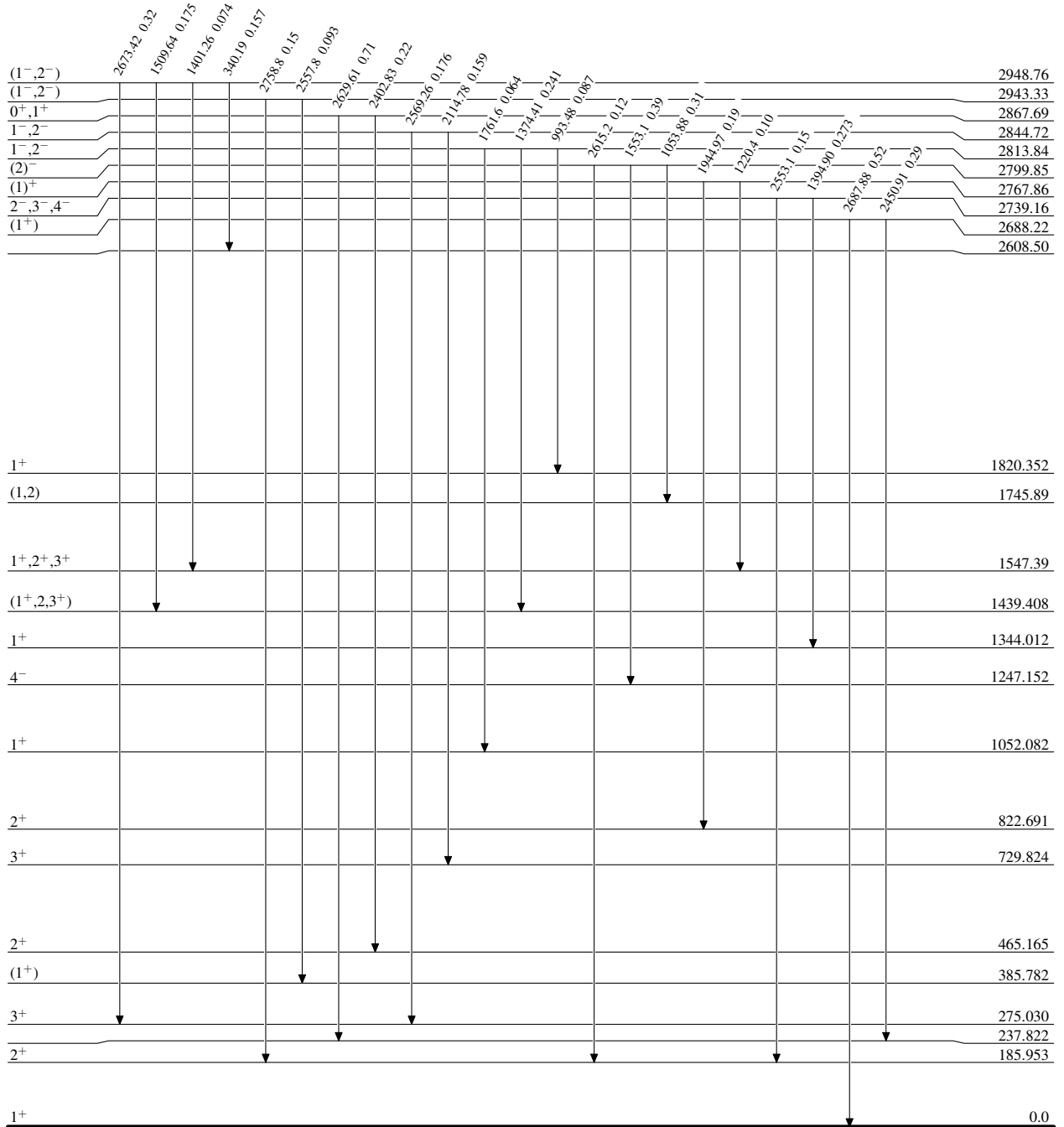
$^{65}\text{Cu}(n,\gamma)\text{E=thermal}$ 1983De29

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



$^{66}_{29}\text{Cu}_{37}$

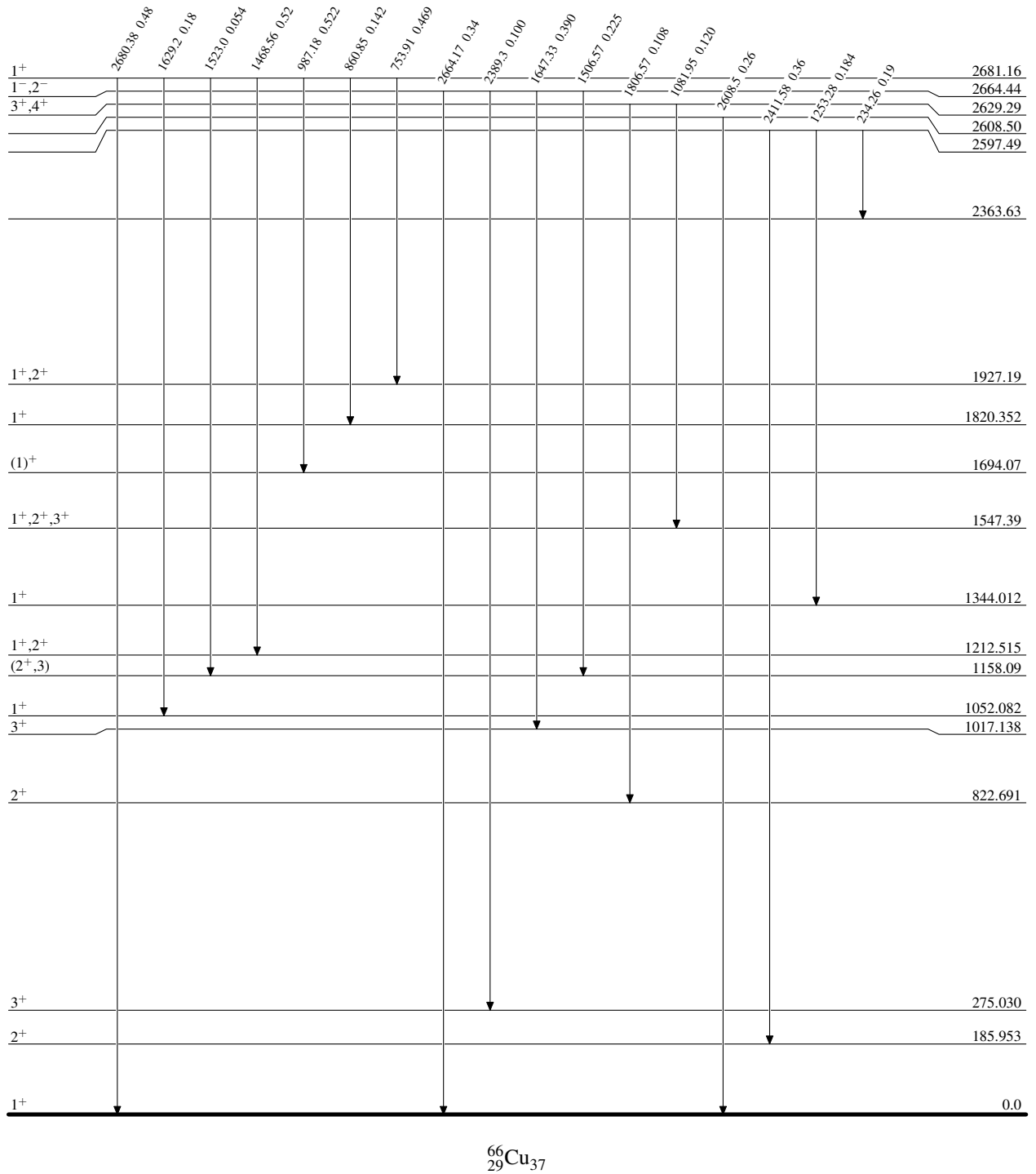
$^{65}\text{Cu}(n,\gamma) E=\text{thermal}$ 1983De29

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



$^{66}_{29}\text{Cu}_{37}$

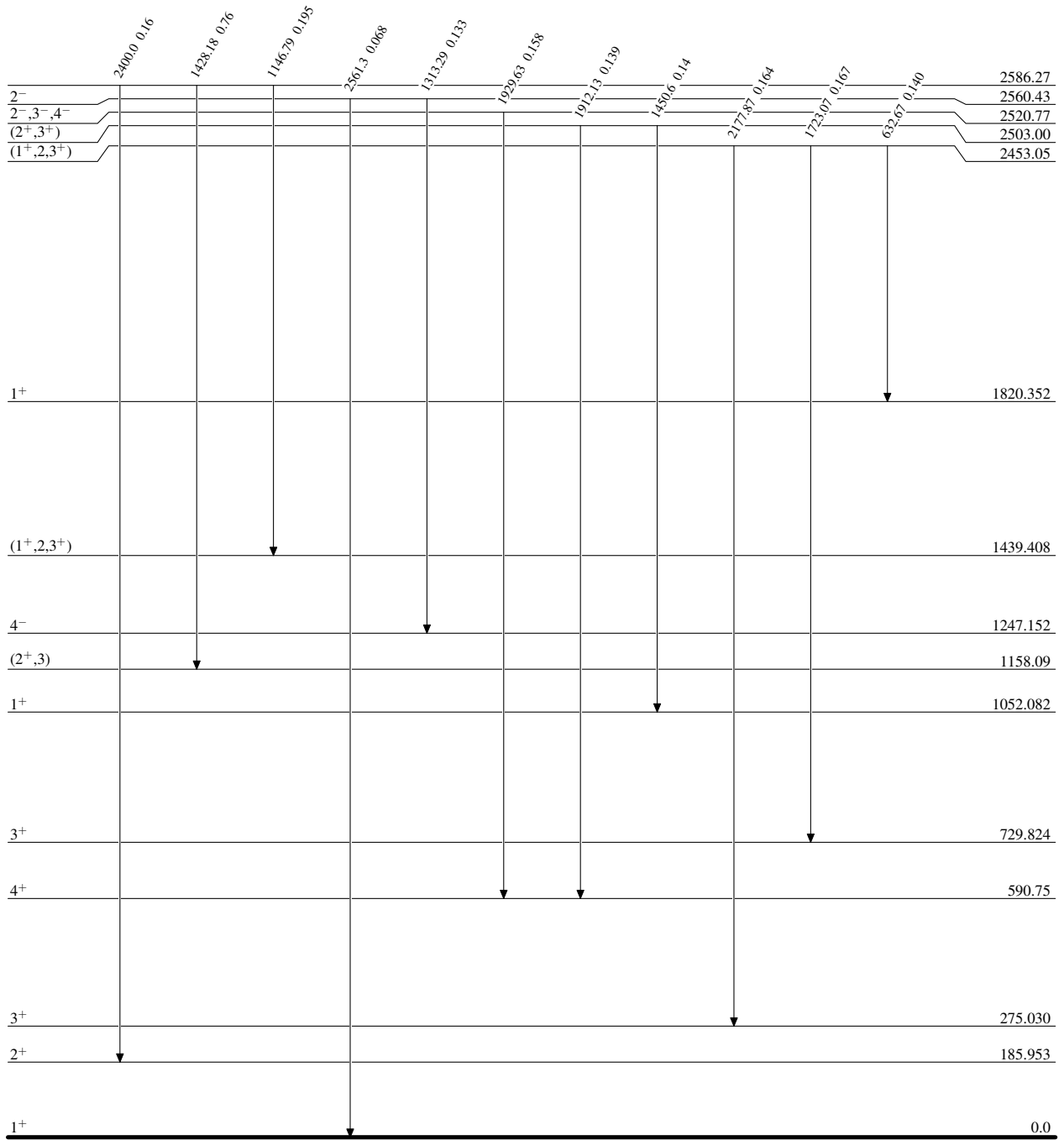
$^{65}\text{Cu}(n,\gamma) \text{E=thermal}$ 1983De29

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



$^{66}_{29}\text{Cu}_{37}$

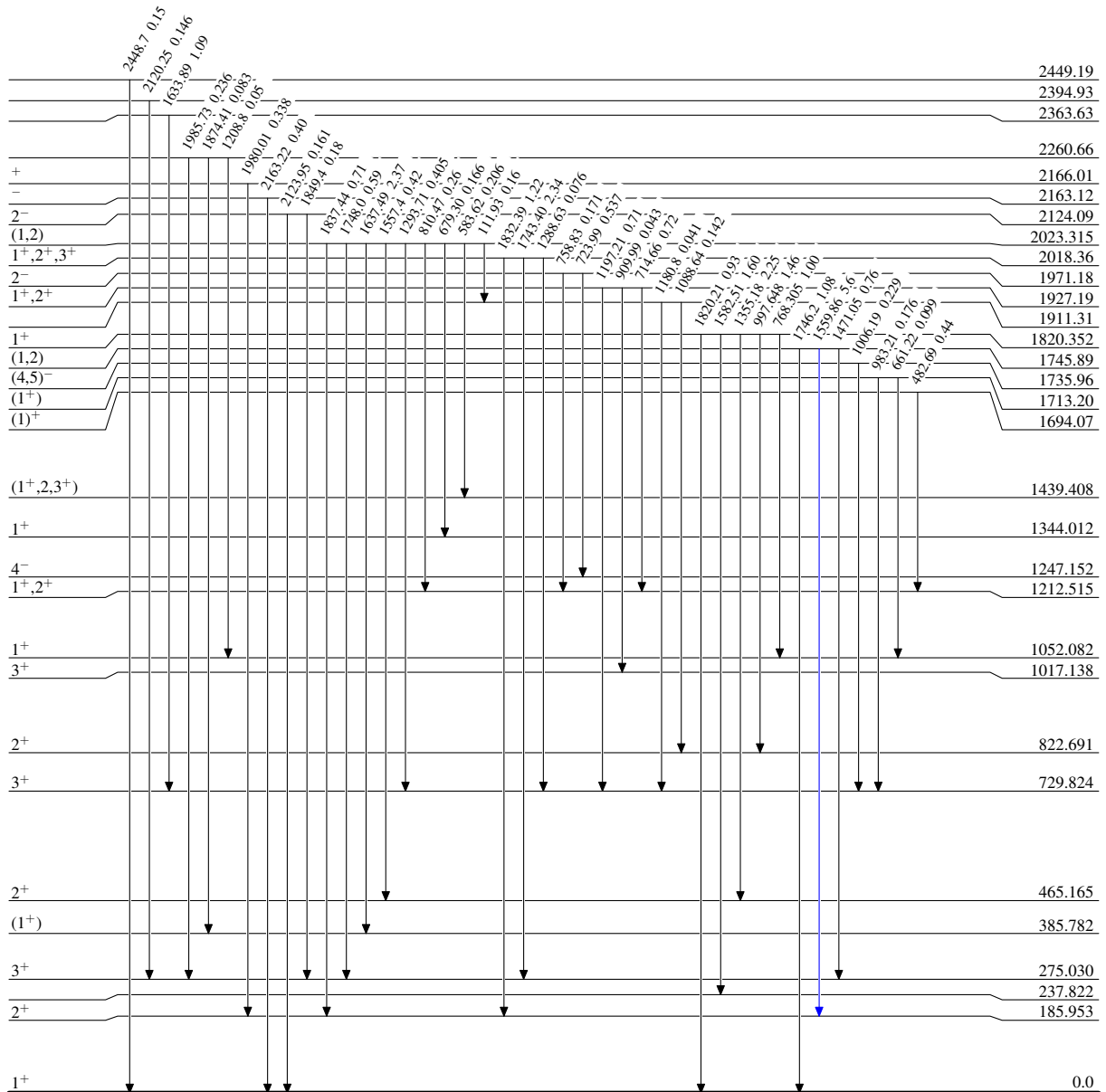
$^{65}\text{Cu}(n,\gamma) E=\text{thermal}$ 1983De29

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



$^{66}_{29}\text{Cu}_{37}$

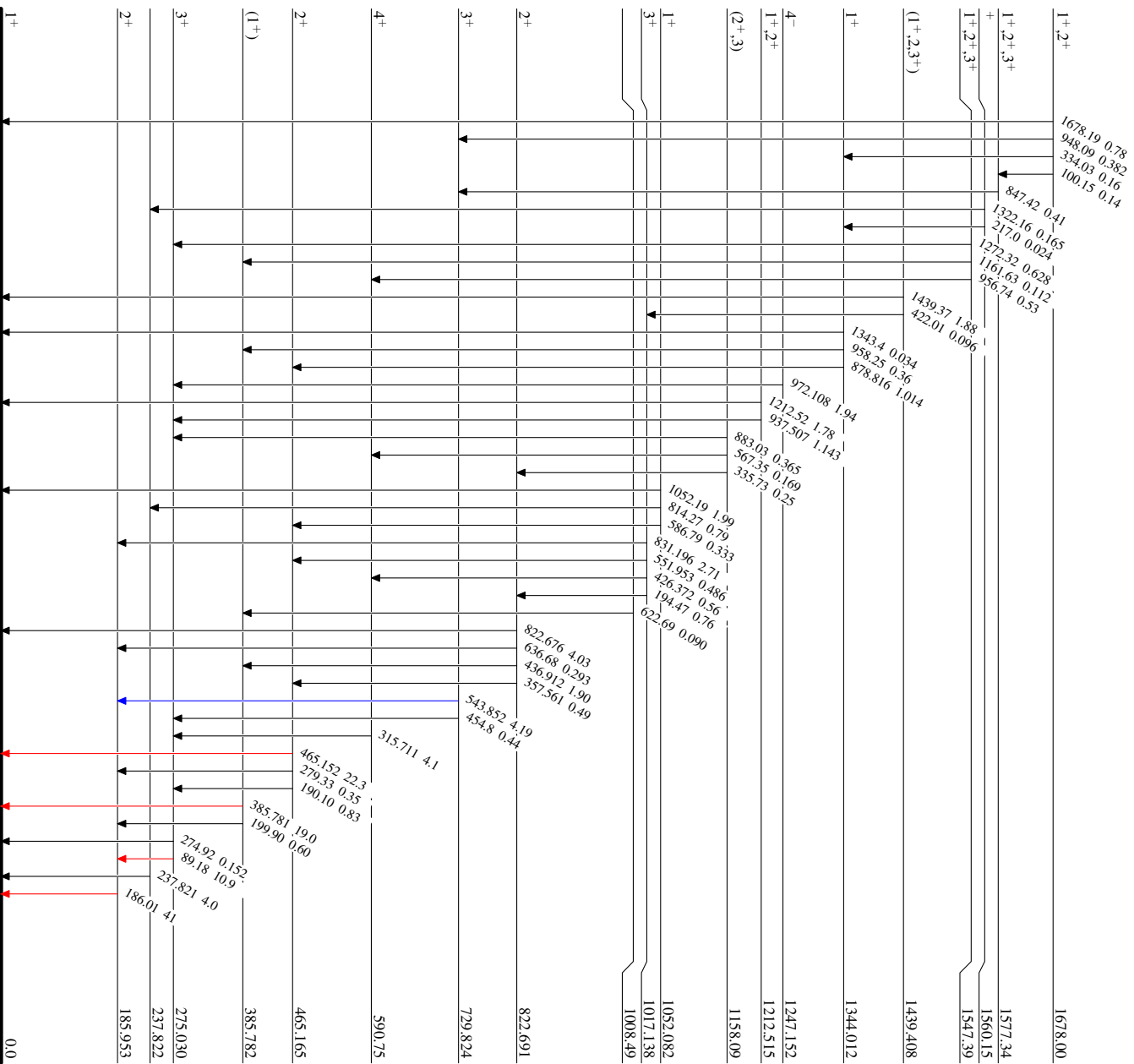
⁶⁵Cu(n,γ)¹⁹⁸SrDe29

Level Scheme (continued)

Intensities: Relative I_γ

Legend

- I_γ < 2% × I_{max}
- I_γ < 10% × I_{max}
- I_γ > 10% × I_{max}



⁶⁶Cu₃₇