

⁶⁵Cu(n,γ) E=2, 24 keV 1983De29

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

1983De29: E=polarized and unpolarized thermal, 2-, 24-keV neutrons; measured E_γ, I_γ, γ circular polarization.
 1967Co18, 1968Ma17, 1969Al11: E_γ and I_γ.
 1973Ko16: polarized neutrons; measured γ circular polarization.
 Other: 1965Ru06.

⁶⁶Cu Levels

E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]	E(level) [†]	J ^π [‡]
0.0	1 ⁺	1820.352 14	1 ⁺	2767.86 12	(1) ⁺	3371.23 9	
185.953 15	2 ⁺	1911.31 8		2799.85 7	(2) ⁻	3397.63 11	
237.822 11		1927.19 5	1 ⁺ ,2 ⁺	2813.84 9	1 ⁻ ,2 ⁻	3432.37 13	
275.030 17	3 ⁺	1971.18 5	2 ⁻	2844.72 10	1 ⁻ ,2 ⁻	3479.48 12	
385.782 10	(1 ⁺)	2018.36 3	1 ⁺ ,2 ⁺ ,3 ⁺	2867.69 7	0 ⁺ ,1 ⁺	3487.05 10	(2 ⁺ ,3 ⁺)
465.165 10	2 ⁺	2023.315 23	(1,2)	2943.33 14	(1 ⁻ ,2 ⁻)	3508.84 11	(2 ⁺ ,3,4 ⁺)
590.75 2	4 ⁺	2124.09 10	2 ⁻	2948.76 8	(1 ⁻ ,2 ⁻)	3535.49 7	
729.824 18	3 ⁺	2163.12 9	-	2953.35 9	(1,2) ⁻	3583.53 12	
822.691 10	2 ⁺	2166.01 7	+	2987.96 21		3601.00 6	
1008.49 10		2260.66 9		3010.18 10	3 ⁺ ,4 ⁺ ,5 ⁺	3636.56 7	1 ⁻ ,2 ⁻
1017.138 15	3 ⁺	2363.63 6		3026.09 6	(1 ⁻ ,2 ⁻)	3705.08 11	2 ⁻ ,3 ⁻ ,4 ⁻
1052.082 17	1 ⁺	2394.93 11		3045.95 13	(1 ⁻ ,2 ⁻)	3750.30 8	
1158.09 4	(2 ⁺ ,3)	2449.19 16		3048.82 11		3780.19 10	
1212.515 20	1 ⁺ ,2 ⁺	2453.05 5	(1 ⁺ ,2,3 ⁺)	3077.29 12	(1 ⁻ ,2 ⁻)	3814.66 10	1 ⁻ ,2 ⁻
1247.152 24	4 ⁻	2503.00 9	(2 ⁺ ,3 ⁺)	3091.37 6	(1 ⁻ ,2 ⁻)	3896.38 8	(2 ⁻)
1344.012 22	1 ⁺	2520.77 13	2 ⁻ ,3 ⁻ ,4 ⁻	3099.08 8	(2 ⁺ ,3,4 ⁺)	3934.58 15	(1 ⁻ ,2 ⁻)
1439.408 25	(1 ⁺ ,2,3 ⁺)	2560.43 16	2 ⁻	3110.86 6		4013.69 12	(1 ⁺ ,2,3 ⁺)
1547.39 4	1 ⁺ ,2 ⁺ ,3 ⁺	2586.27 4		3141.74 15		4056.98 8	(1,2) ⁻
1560.15 9	+	2597.49 6		3151.97 9		4116.41 10	
1577.34 5	1 ⁺ ,2 ⁺ ,3 ⁺	2608.50 11		3165.77 7	(1,2,3) ⁺	4300.2 3	
1678.00 3	1 ⁺ ,2 ⁺	2629.29 9	3 ⁺ ,4 ⁺	3208.95 8		4462.70 10	(1,2) ⁻
1694.07 5	(1) ⁺	2664.44 6	1 ⁻ ,2 ⁻	3247.83 8		4527.91 9	(1,2) ⁻
1713.20 6	(1 ⁺)	2681.16 4	1 ⁺	3287.36 9	+	4850.76 8	
1735.96 6	(4,5) ⁻	2688.22 8	(1 ⁺)	3333.77 5	+	5077.21 8	
1745.89 4	(1,2)	2739.16 7	2 ⁻ ,3 ⁻ ,4 ⁻	3342.06 11			

[†] From thermal-neutron capture data.

[‡] From Adopted Levels.

γ(⁶⁶Cu)

E _i (level)	J _i ^π	E _γ [†]	I _γ [‡]	E _f	J _f ^π
185.953	2 ⁺	186.01 @ 5	100	0.0	1 ⁺
237.822		237.821 11	100	0.0	1 ⁺
275.030	3 ⁺	89.18 4	98.62 23	185.953	2 ⁺
		274.92 9	1.38 23	0.0	1 ⁺
385.782	(1 ⁺)	199.90 @ 7	3.1 4	185.953	2 ⁺
		385.781 @ 12	96.9 4	0.0	1 ⁺
465.165	2 ⁺	190.10 3	3.6 4	275.030	3 ⁺
		279.33 @ 11	1.5 3	185.953	2 ⁺
		465.152 @ 12	94.9 5	0.0	1 ⁺

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$^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ **1983De29** (continued) $\gamma(^{66}\text{Cu})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π
590.75	4 ⁺	315.711 @ 21	100	275.030	3 ⁺
729.824	3 ⁺	454.8 5	9 4	275.030	3 ⁺
		543.852 @ 13	91 4	185.953	2 ⁺
822.691	2 ⁺	357.561 21	7.3 5	465.165	2 ⁺
		436.912 @ 12	28.3 11	385.782	(1 ⁺)
		636.68 3	4.36 19	185.953	2 ⁺
		822.676 16	60.0 10	0.0	1 ⁺
1008.49		622.69 10	100	385.782	(1 ⁺)
1017.138	3 ⁺	194.47 3	16.9 15	822.691	2 ⁺
		426.372 21	12.4 6	590.75	4 ⁺
		551.953 22	10.8 5	465.165	2 ⁺
		831.196 16	60.0 13	185.953	2 ⁺
1052.082	1 ⁺	586.79 5	10.7 6	465.165	2 ⁺
		814.27 4	25.2 10	237.822	
		1052.19 3	64.1 11	0.0	1 ⁺
1158.09	(2 ⁺ ,3)	335.73 11	32 3	822.691	2 ⁺
		567.35 9	21.6 19	590.75	4 ⁺
		883.03 4	46.7 23	275.030	3 ⁺
1212.515	1 ⁺ ,2 ⁺	937.507 17	39.0 9	275.030	3 ⁺
		1212.52 4	61.0 9	0.0	1 ⁺
1247.152	4 ⁻	972.108 18	100	275.030	3 ⁺
1344.012	1 ⁺	878.816 24	72.0 19	465.165	2 ⁺
		958.25 9	25.6 17	385.782	(1 ⁺)
		1343.4 8	2.4 13	0.0	1 ⁺
1439.408	(1 ⁺ ,2,3 ⁺)	422.01 12	4.9 7	1017.138	3 ⁺
		1439.37 3	95.1 7	0.0	1 ⁺
1547.39	1 ⁺ ,2 ⁺ ,3 ⁺	956.74 6	41.6 17	590.75	4 ⁺
		1161.63 16	8.8 9	385.782	(1 ⁺)
		1272.32 4	49.6 16	275.030	3 ⁺
1560.15	+	217.0 5	13 7	1344.012	1 ⁺
		1322.16 14	87 7	237.822	
1577.34	1 ⁺ ,2 ⁺ ,3 ⁺	847.42 5	100	729.824	3 ⁺
1678.00	1 ⁺ ,2 ⁺	100.15 23	10 3	1577.34	1 ⁺ ,2 ⁺ ,3 ⁺
		334.03 16	11.0 17	1344.012	1 ⁺
		948.09 3	26.0 13	729.824	3 ⁺
		1678.19 # 4	53.2 23	0.0	1 ⁺
1694.07	(1) ⁺	482.69 10	100	1212.515	1 ⁺ ,2 ⁺
1713.20	(1) ⁺	661.22 9	36 3	1052.082	1 ⁺
		983.21 8	64 3	729.824	3 ⁺
1735.96	(4,5) ⁻	1006.19 6	100	729.824	3 ⁺
1745.89	(1,2)	1471.05 8	10.1 7	275.030	3 ⁺
		1559.86 6	75.4 20	185.953	2 ⁺
		1746.2 # 3	14.5 20	0.0	1 ⁺
1820.352	1 ⁺	768.305 @ 23	13.8 4	1052.082	1 ⁺
		997.648 @ 18	20.2 5	822.691	2 ⁺
		1355.18 4	31.1 10	465.165	2 ⁺
		1582.51 3	22.1 8	237.822	
		1820.21 6	12.8 7	0.0	1 ⁺
1911.31		1088.64 # 10	78 5	822.691	2 ⁺
		1180.8 3	22 5	729.824	3 ⁺
1927.19	1 ⁺ ,2 ⁺	714.66 19	8.7 16	1212.515	1 ⁺ ,2 ⁺
		909.99 # 22	5.2 10	1017.138	3 ⁺
		1197.21 7	86.0 18	729.824	3 ⁺

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$^{65}\text{Cu}(n,\gamma)$ E=2, 24 keV **1983De29** (continued) $\gamma(^{66}\text{Cu})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π
1971.18	2^-	723.99 5	75.9 17	1247.152	4^-
		758.83# 9	24.1 17	1212.515	$1^+, 2^+$
2018.36	$1^+, 2^+, 3^+$	1288.63 21	2.1 4	729.824	3^+
		1743.40 5	64.3 17	275.030	3^+
		1832.39# 3	33.6 16	185.953	2^+
2023.315	(1,2)	111.93 13	3.0 6	1911.31	
		583.62 8	3.9 4	1439.408	$(1^+, 2, 3^+)$
		679.30 5	3.13 25	1344.012	1^+
		810.47 19	4.9 7	1212.515	$1^+, 2^+$
		1293.71 7	7.6 6	729.824	3^+
		1557.4 7	8 3	465.165	2^+
		1637.49 4	44.7 25	385.782	(1^+)
		1748.0 3	11 3	275.030	3^+
		1837.44 4	13.5 10	185.953	2^+
2124.09	2^-	1849.4 3	52 5	275.030	3^+
		2123.95 19	48 5	0.0	1^+
2163.12	$-$	2163.22# 11	100	0.0	1^+
2166.01	$+$	1980.01 8	100	185.953	2^+
2260.66		1208.8 9	13 7	1052.082	1^+
		1874.41# 20	23 3	385.782	(1^+)
		1985.73 14	64 6	275.030	3^+
2363.63		1633.89 6	100	729.824	3^+
2394.93		2120.25 25	100	275.030	3^+
2449.19		2448.7 4	100	0.0	1^+
2453.05	$(1^+, 2, 3^+)$	632.67 6	29.8 19	1820.352	1^+
		1723.07 12	35.4 25	729.824	3^+
		2177.87 15	35 3	275.030	3^+
2503.00	$(2^+, 3^+)$	1450.6 3	51 5	1052.082	1^+
		1912.13# 17	49 5	590.75	4^+
2520.77	$2^-, 3^-, 4^-$	1929.63 22	100	590.75	4^+
2560.43	2^-	1313.29 17	66 8	1247.152	4^-
		2561.3 6	34 8	0.0	1^+
2586.27		1146.79 7	17.6 11	1439.408	$(1^+, 2, 3^+)$
		1428.18 5	68.4 23	1158.09	$(2^+, 3)$
		2400.0# 3	14.1 24	185.953	2^+
2597.49		234.26 14	26 4	2363.63	
		1253.28 8	25.2 20	1344.012	1^+
		2411.58 12	49 3	185.953	2^+
2608.50		2608.5# 3	100	0.0	1^+
2629.29	$3^+, 4^+$	1081.95 12	53 4	1547.39	$1^+, 2^+, 3^+$
		1806.57# 17	47 4	822.691	2^+
2664.44	$1^-, 2^-$	1506.57# 15	21.4 17	1158.09	$(2^+, 3)$
		1647.33 7	37.1 21	1017.138	3^+
		2389.3 4	9.5 20	275.030	3^+
		2664.17 16	32.0 23	0.0	1^+
2681.16	1^+	753.91 4	19.8 8	1927.19	$1^+, 2^+$
		860.85 10	6.0 6	1820.352	1^+
		987.18 3	22.1 8	1694.07	$(1)^+$
		1468.56 12	22.0 14	1212.515	$1^+, 2^+$
		1523.0 4	2.3 6	1158.09	$(2^+, 3)$
		1629.2 3	7.6 13	1052.082	1^+
		2680.38# 13	20.2 12	0.0	1^+
2688.22	(1^+)	2450.91# 23	36 4	237.822	

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$^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ **1983De29 (continued)** $\gamma(^{66}\text{Cu})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π
2688.22	(1 ⁺)	2687.88 12	64 4	0.0	1 ⁺
2739.16	2 ⁻ ,3 ⁻ ,4 ⁻	1394.90 [#] 9	65 4	1344.012	1 ⁺
		2553.1 3	35 4	185.953	2 ⁺
2767.86	(1 ⁺)	1220.4 6	35 10	1547.39	1 ⁺ ,2 ⁺ ,3 ⁺
		1944.97 24	65 10	822.691	2 ⁺
2799.85	(2 ⁻)	1053.88 20	38 6	1745.89	(1,2)
		1553.1 3	47 6	1247.152	4 ⁻
		2615.2 8	15 5	185.953	2 ⁺
2813.84	1 ⁻ ,2 ⁻	993.48 17	22 3	1820.352	1 ⁺
		1374.41 14	61 4	1439.408	(1 ⁺ ,2,3 ⁺)
		1761.6 6	16 5	1052.082	1 ⁺
2844.72	1 ⁻ ,2 ⁻	2114.78 20	47 4	729.824	3 ⁺
		2569.26 21	53 4	275.030	3 ⁺
2867.69	0 ⁺ ,1 ⁺	2402.83 24	24 3	465.165	2 ⁺
		2629.61 12	76 3	237.822	
2943.33	(1 ⁻ ,2 ⁻)	2557.8 5	39 9	385.782	(1 ⁺)
		2758.8 [#] 5	61 9	185.953	2 ⁺
2948.76	(1 ⁻ ,2 ⁻)	340.19 12	22 3	2608.50	
		1401.26 21	10.2 17	1547.39	1 ⁺ ,2 ⁺ ,3 ⁺
		1509.64 18	24.2 23	1439.408	(1 ⁺ ,2,3 ⁺)
		2673.42 [#] 16	44 3	275.030	3 ⁺
2953.35	(1,2) ⁻	289.2 3	6.4 24	2664.44	1 ⁻ ,2 ⁻
		1901.52 16	16.9 20	1052.082	1 ⁺
		2131.25 [#] 22	12.7 20	822.691	2 ⁺
		2488.4 [#] 4	27 5	465.165	2 ⁺
		2952.64 21	37 4	0.0	1 ⁺
2987.96		1017.1 3	54 9	1971.18	2 ⁻
		2986.9 6	46 9	0.0	1 ⁺
3010.18	3 ⁺ ,4 ⁺ ,5 ⁺	1666.15 13	46 6	1344.012	1 ⁺
		2545.2 [#] 5	22 6	465.165	2 ⁺
		2824.8 6	32 7	185.953	2 ⁺
3026.09	(1 ⁻ ,2 ⁻)	1280.20 7	32.5 18	1745.89	(1,2)
		3025.77 [#] 12	67.5 18	0.0	1 ⁺
3045.95	(1 ⁻ ,2 ⁻)	2315.7 3	74 10	729.824	3 ⁺
		2770.7 8	26 10	275.030	3 ⁺
3048.82		2862.63 [#] 13	100	185.953	2 ⁺
3077.29	(1 ⁻ ,2 ⁻)	556.46 22	9.2 21	2520.77	2 ⁻ ,3 ⁻ ,4 ⁻
		2059.9 3	11.2 22	1017.138	3 ⁺
		2254.5 9	14 7	822.691	2 ⁺
		2612.1 4	44 6	465.165	2 ⁺
		2890.6 3	21 4	185.953	2 ⁺
3091.37	(1 ⁻ ,2 ⁻)	1652.01 6	69 3	1439.408	(1 ⁺ ,2,3 ⁺)
		2039.33 25	10.7 16	1052.082	1 ⁺
		3090.95 [#] 25	20.7 25	0.0	1 ⁺
3099.08	(2 ⁺ ,3,4 ⁺)	2082.6 3	16 4	1017.138	3 ⁺
		2508.3 7	26 8	590.75	4 ⁺
		2713.3 5	22 6	385.782	(1 ⁺)
		2912.57 [#] 18	36 5	185.953	2 ⁺
3110.86		1139.65 [#] 4	81 4	1971.18	2 ⁻
		3111.4 4	19 4	0.0	1 ⁺
3141.74		2866.61 [#] 15	100	275.030	3 ⁺
3151.97		788.42 8	48 4	2363.63	
		2876.19 21	52 4	275.030	3 ⁺

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${}^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ **1983De29 (continued)** $\gamma({}^{66}\text{Cu})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π
3165.77	(1,2,3) ⁺	2436.7 4	13 3	729.824	3 ⁺
		2700.26 [#] 10	67 3	465.165	2 ⁺
		3165.8 3	20.0 23	0.0	1 ⁺
3208.95		1042.86 [#] 11	74 4	2166.01	+
		3208.1 [#] 3	26 4	0.0	1 ⁺
3247.83		1670.32 11	100	1577.34	1 ⁺ ,2 ⁺ ,3 ⁺
3287.36	+	2821.76 [#] 13	86.0 22	465.165	2 ⁺
		2901.2 [#] 3	14.0 22	385.782	(1 ⁺)
3333.77	+	533.96 7	23.7 19	2799.85	(2) ⁻
		747.48 3	76.3 19	2586.27	
3342.06		3067.2 [#] 3	100	275.030	3 ⁺
3371.23		741.94 [#] 3	66 4	2629.29	3 ⁺ ,4 ⁺
		2641.3 3	34 4	729.824	3 ⁺
3397.63		2806.9 3	56 8	590.75	4 ⁺
		3121.3 [#] 5	44 8	275.030	3 ⁺
3432.37		1408.4 [#] 3	17 4	2023.315	(1,2)
		2380.34 18	83 4	1052.082	1 ⁺
3479.48		665.60 [#] 9	40 6	2813.84	1 ⁻ ,2 ⁻
		3241.9 [#] 4	60 6	237.822	
3487.05	(2 ⁺ ,3 ⁺)	1515.3 4	9 3	1971.18	2 ⁻
		2478.2 5	28 6	1008.49	
		2896.0 [#] 4	14 3	590.75	4 ⁺
		3021.72 [#] 21	36 4	465.165	2 ⁺
3508.84	(2 ⁺ ,3,4 ⁺)	3486.2 [#] 6	13 3	0.0	1 ⁺
		2492.0 8	13 5	1017.138	3 ⁺
		2918.0 4	8.0 17	590.75	4 ⁺
		3270.78 [#] 14	69 5	237.822	
3535.49		3322.2 [#] 6	9 3	185.953	2 ⁺
		457.6 5	42 13	3077.29	(1 ⁻ ,2 ⁻)
		1799.84 [#] 14	15 3	1735.96	(4,5) ⁻
		1975.26 [#] 12	20 5	1560.15	+
3583.53		2095.76 13	22 5	1439.408	(1 ⁺ ,2,3 ⁺)
		537.55 8	20 3	3045.95	(1 ⁻ ,2 ⁻)
		2144.22 24	35 4	1439.408	(1 ⁺ ,2,3 ⁺)
		2371.4 4	24 6	1212.515	1 ⁺ ,2 ⁺
3601.00		3307.4 [#] 6	20 5	275.030	3 ⁺
		114.36 16	15 3	3487.05	(2 ⁺ ,3 ⁺)
		1854.3 4	7.7 19	1745.89	(1,2)
		2023.55 6	66 4	1577.34	1 ⁺ ,2 ⁺ ,3 ⁺
3636.56	1 ⁻ ,2 ⁻	2870.7 5	11 3	729.824	3 ⁺
		1115.48 23	8.8 14	2520.77	2 ⁻ ,3 ⁻ ,4 ⁻
		1890.61 18	12.5 14	1745.89	(1,2)
		2423.94 18	17.1 19	1212.515	1 ⁺ ,2 ⁺
		2584.3 4	8.0 18	1052.082	1 ⁺
		2619.14 [#] 24	25 3	1017.138	3 ⁺
3705.08	2 ⁻ ,3 ⁻ ,4 ⁻	3045.46 23	20.2 21	590.75	4 ⁺
		3450.3 [#] 3	8.3 13	185.953	2 ⁺
		1682.00 17	44 4	2023.315	(1,2)
3750.30		2457.66 18	56 4	1247.152	4 ⁻
		651.10 13	13.6 16	3099.08	(2 ⁺ ,3,4 ⁺)
		1120.8 4	9.0 23	2629.29	3 ⁺ ,4 ⁺

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${}^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ **1983De29** (continued) $\gamma({}^{66}\text{Cu})$ (continued)

$E_i(\text{level})$	J_i^π	E_γ^\dagger	I_γ^\ddagger	E_f	J_f^π
3750.30		1732.27 [#] 17	20.0 22	2018.36	1 ⁺ ,2 ⁺ ,3 ⁺
		2004.42 [#] 10	39 3	1745.89	(1,2)
		3563.7 [#] 4	19 3	185.953	2 ⁺
3780.19		770.64 25	42 5	3010.18	3 ⁺ ,4 ⁺ ,5 ⁺
		1416.38 11	58 5	2363.63	
3814.66	1 ⁻ ,2 ⁻	417.03 6	23.4 22	3397.63	
		1843.71 14	25.1 24	1971.18	2 ⁻
		2991.1 [#] 4	21 4	822.691	2 ⁺
		3348.5 [#] 3	19.5 23	465.165	2 ⁺
		3814.2 [#] 4	11.2 20	0.0	1 ⁺
3896.38	(2 ⁻)	1298.87 [#] 6	68 3	2597.49	
		2160.4 [#] 3	18 3	1735.96	(4,5) ⁻
		3896.3 [#] 4	14.8 20	0.0	1 ⁺
3934.58	(1 ⁻ ,2 ⁻)	1916.35 22	45 5	2018.36	1 ⁺ ,2 ⁺ ,3 ⁺
		3548.6 [#] 3	55 5	385.782	(1 ⁺)
4013.69	(1 ⁺ ,2,3 ⁺)	2996.78 [#] 16	75 3	1017.138	3 ⁺
		3627.9 3	25 3	385.782	(1 ⁺)
4056.98	(1,2) ⁻	1607.34 [#] 18	13.2 15	2449.19	
		3782.18 [#] 17	34.4 19	275.030	3 ⁺
		3871.04 [#] 11	52.4 18	185.953	2 ⁺
4116.41		1303.03 22	17 3	2813.84	1 ⁻ ,2 ⁻
		3293.49 11	83 3	822.691	2 ⁺
4300.2		3476.9 5	48 8	822.691	2 ⁺
		3835.8 [#] 5	23 6	465.165	2 ⁺
		4024.9 [#] 7	29 8	275.030	3 ⁺
		4462.70	(1,2) ⁻	4276.58 [#] 10	100
4527.91	(1,2) ⁻	1728.01 [#] 6	65 4	2799.85	(2) ⁻
		2708.2 [#] 4	18 3	1820.352	1 ⁺
		2968.8 [#] 4	17 3	1560.15	⁺
4850.76		1773.5 3	9.0 16	3077.29	(1 ⁻ ,2 ⁻)
		3137.18 [#] 17	24.5 19	1713.20	(1 ⁺)
		3172.95 [#] 11	60.2 24	1678.00	1 ⁺ ,2 ⁺
		3275.2 [#] 7	6.3 22	1577.34	1 ⁺ ,2 ⁺ ,3 ⁺
5077.21		1589.79 20	27 3	3487.05	(2 ⁺ ,3 ⁺)
		1966.29 [#] 11	44 3	3110.86	
		3383.6 [#] 3	28 4	1694.07	(1) ⁺

[†] From thermal-capture data of **1983De29**.

[‡] Percent photon branching from each level (**1983De29**).

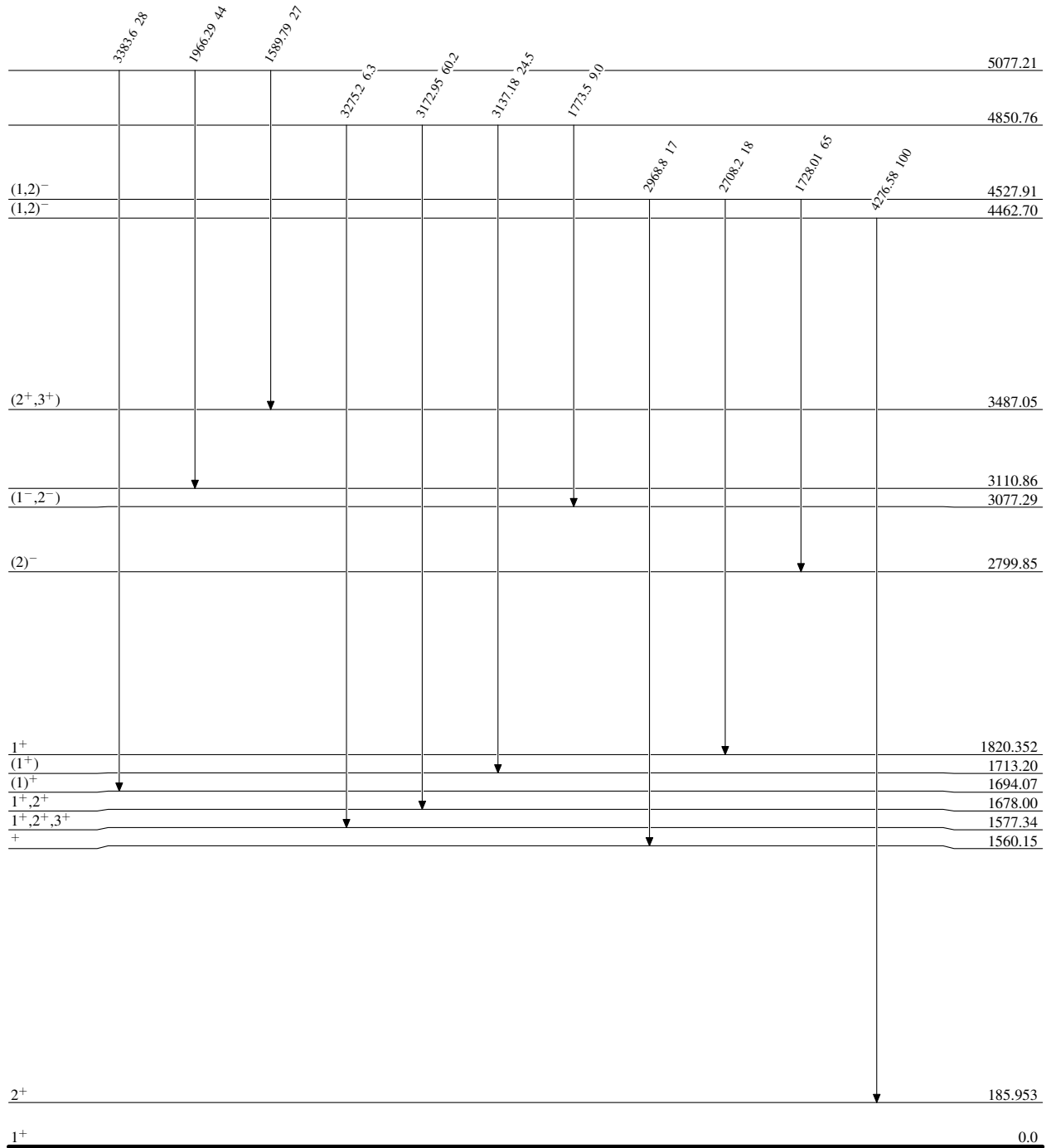
[#] Based on level energies, placement of this transition is the only possible one in the level scheme of **1983De29**.

[@] Placement of this transition also reported from coincidence experiments in **1968Sh01** and **1972B116**.

$^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ 1983De29

Level Scheme

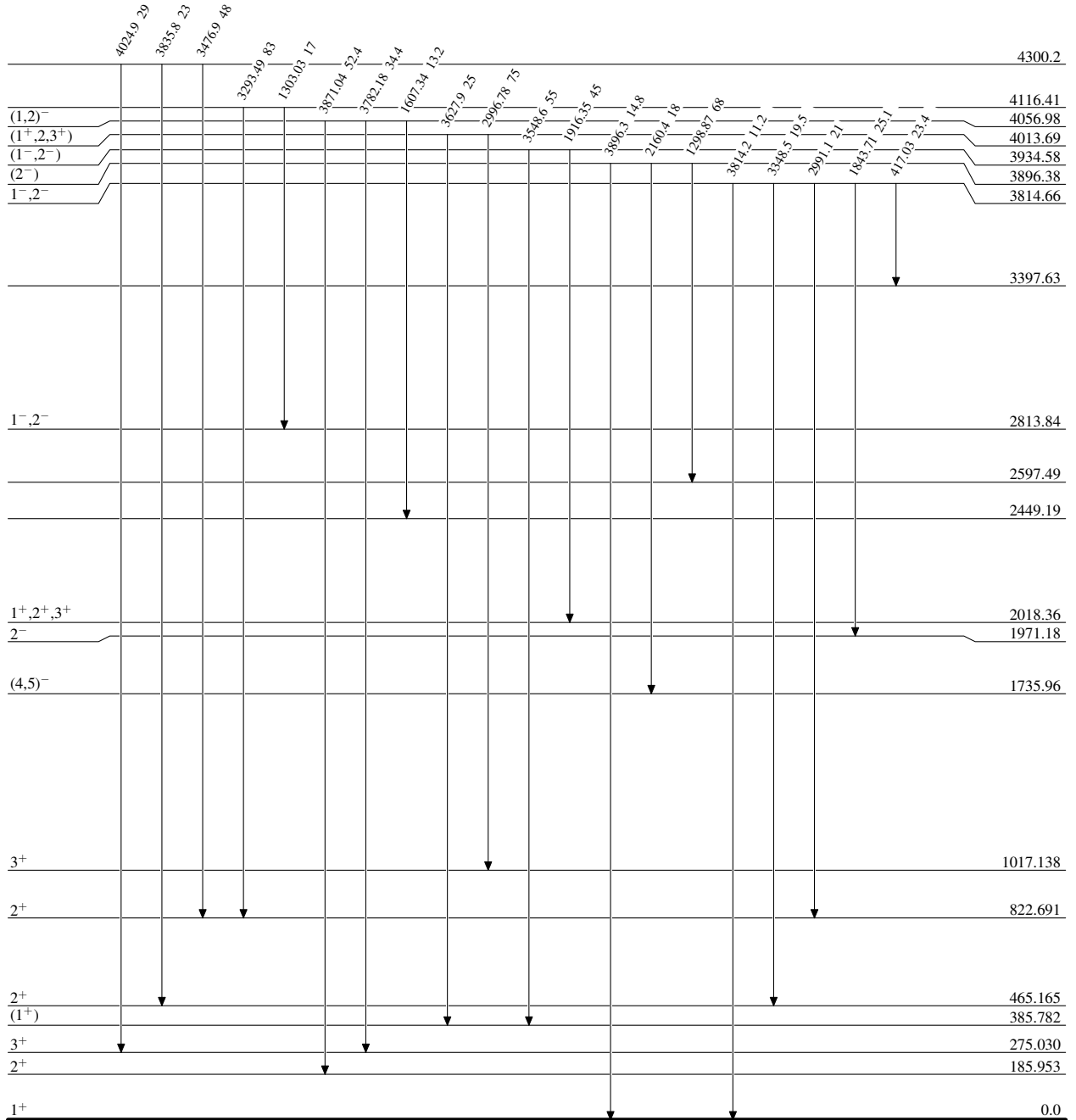
Intensities: % photon branching from each level

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

$^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV} \quad 1983\text{De29}$

Level Scheme (continued)

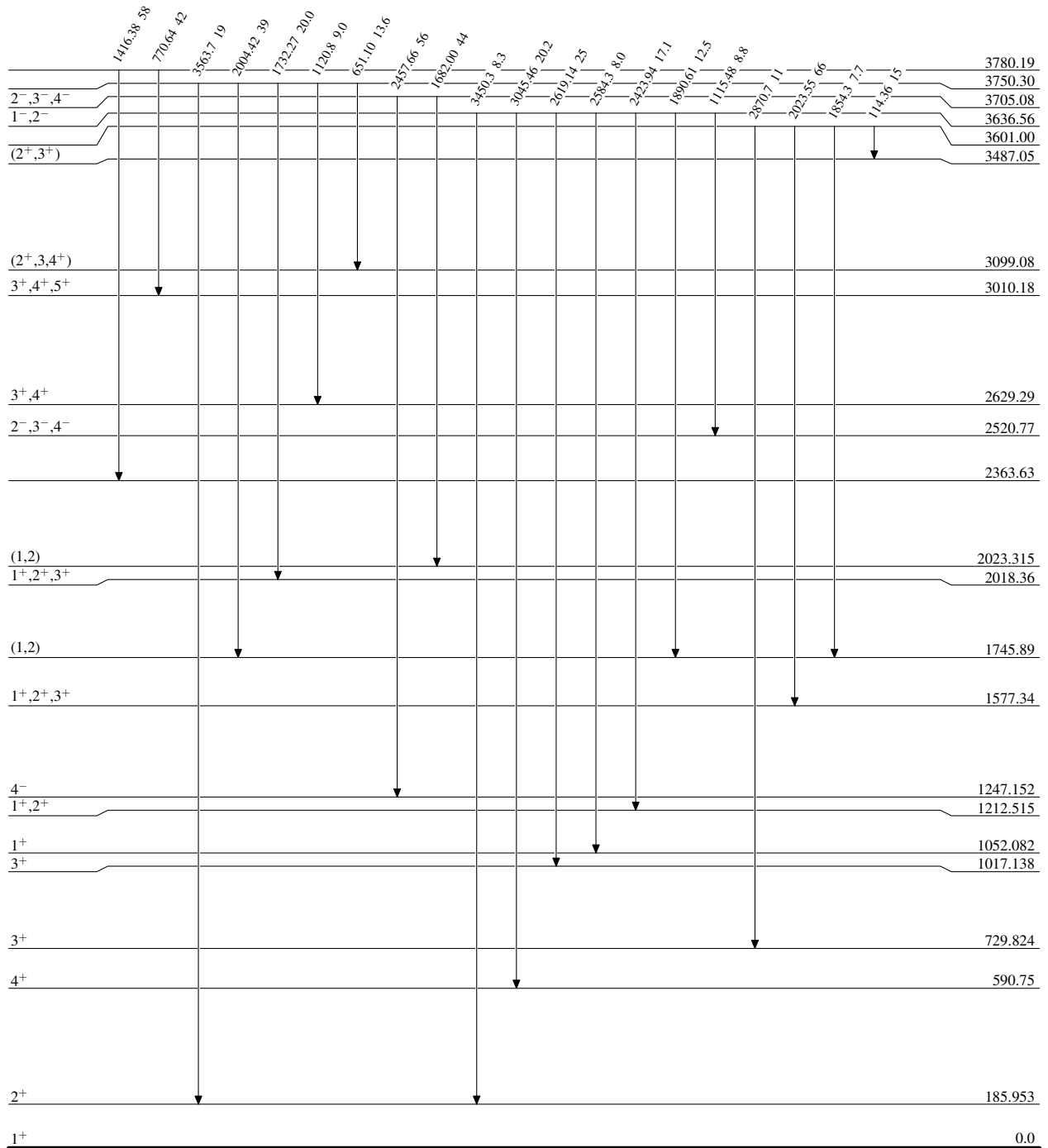
Intensities: % photon branching from each level

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

$^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ 1983De29

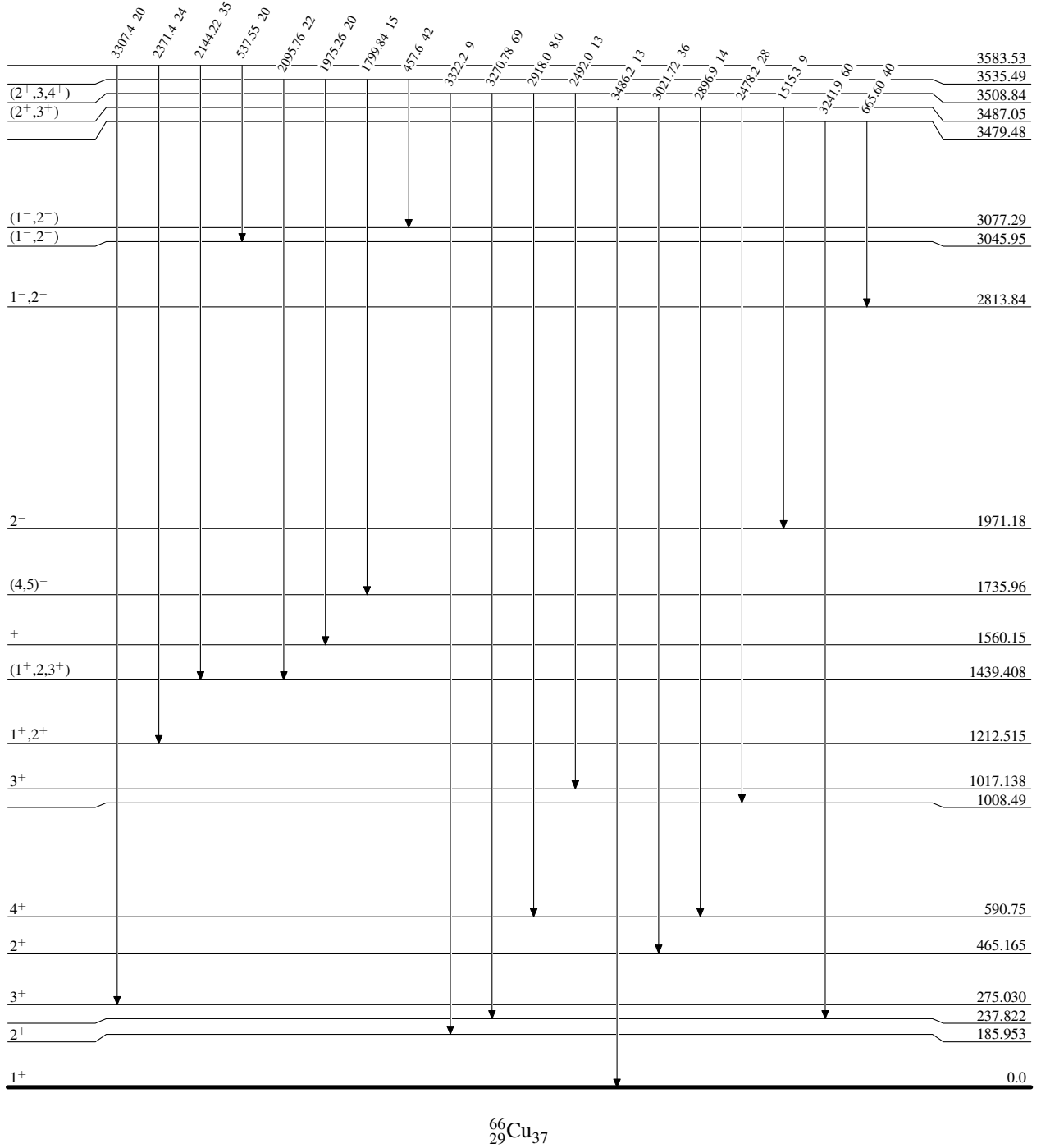
Level Scheme (continued)

Intensities: % photon branching from each level

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

$^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV} \quad 1983\text{De29}$ Level Scheme (continued)

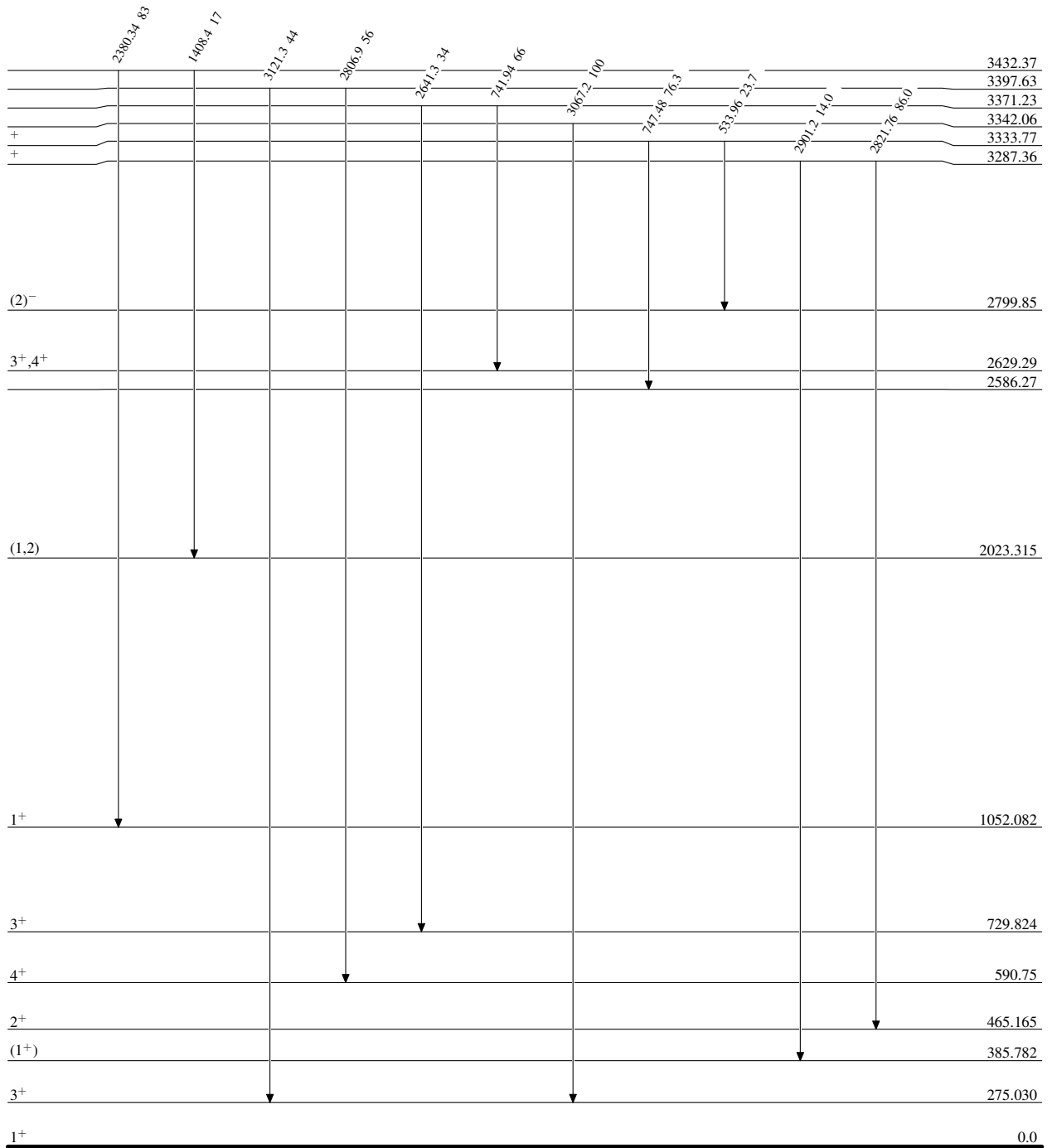
Intensities: % photon branching from each level



$^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ 1983De29

Level Scheme (continued)

Intensities: % photon branching from each level

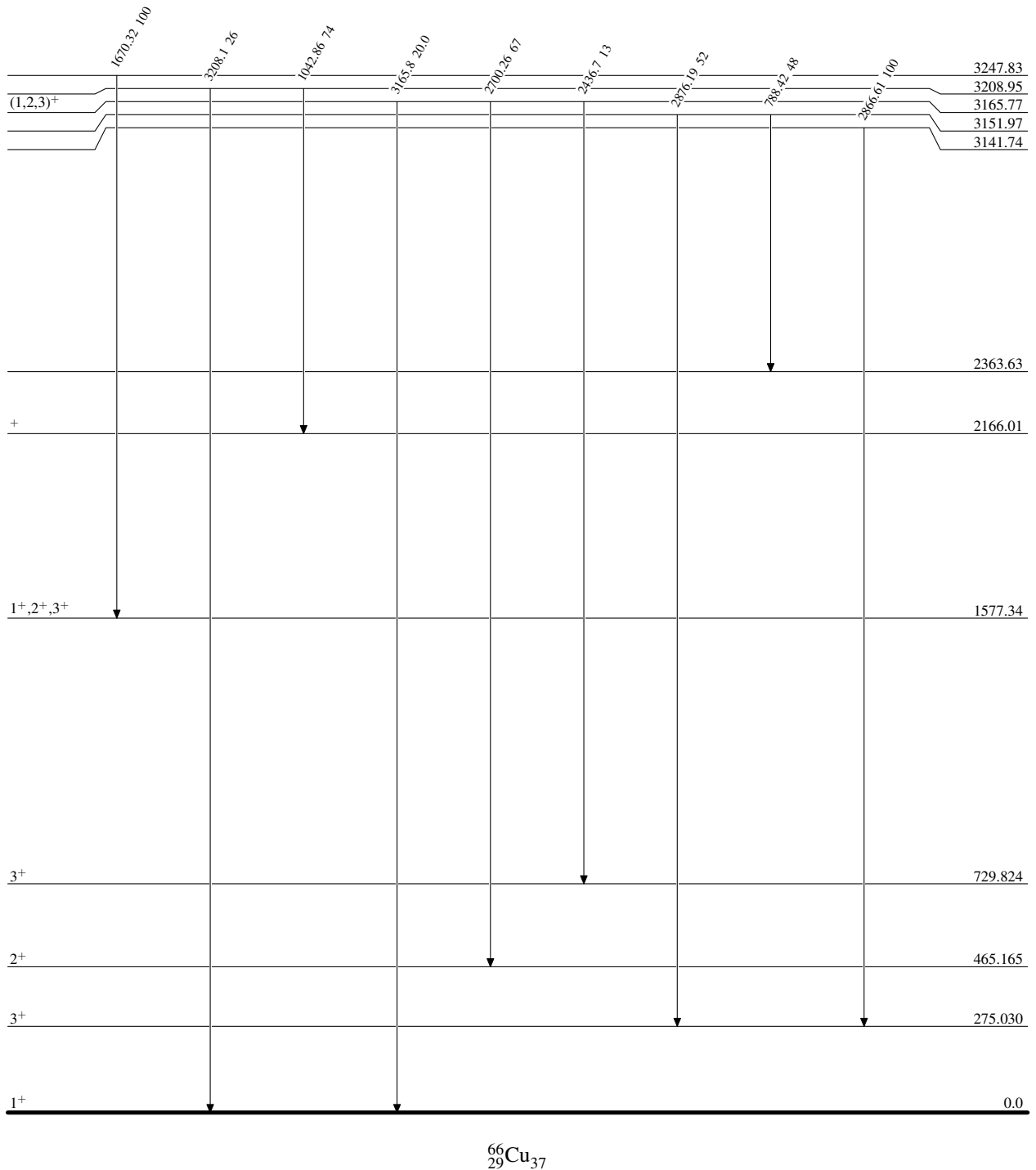


$^{66}_{29}\text{Cu}_{37}$

${}^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ 1983De29

Level Scheme (continued)

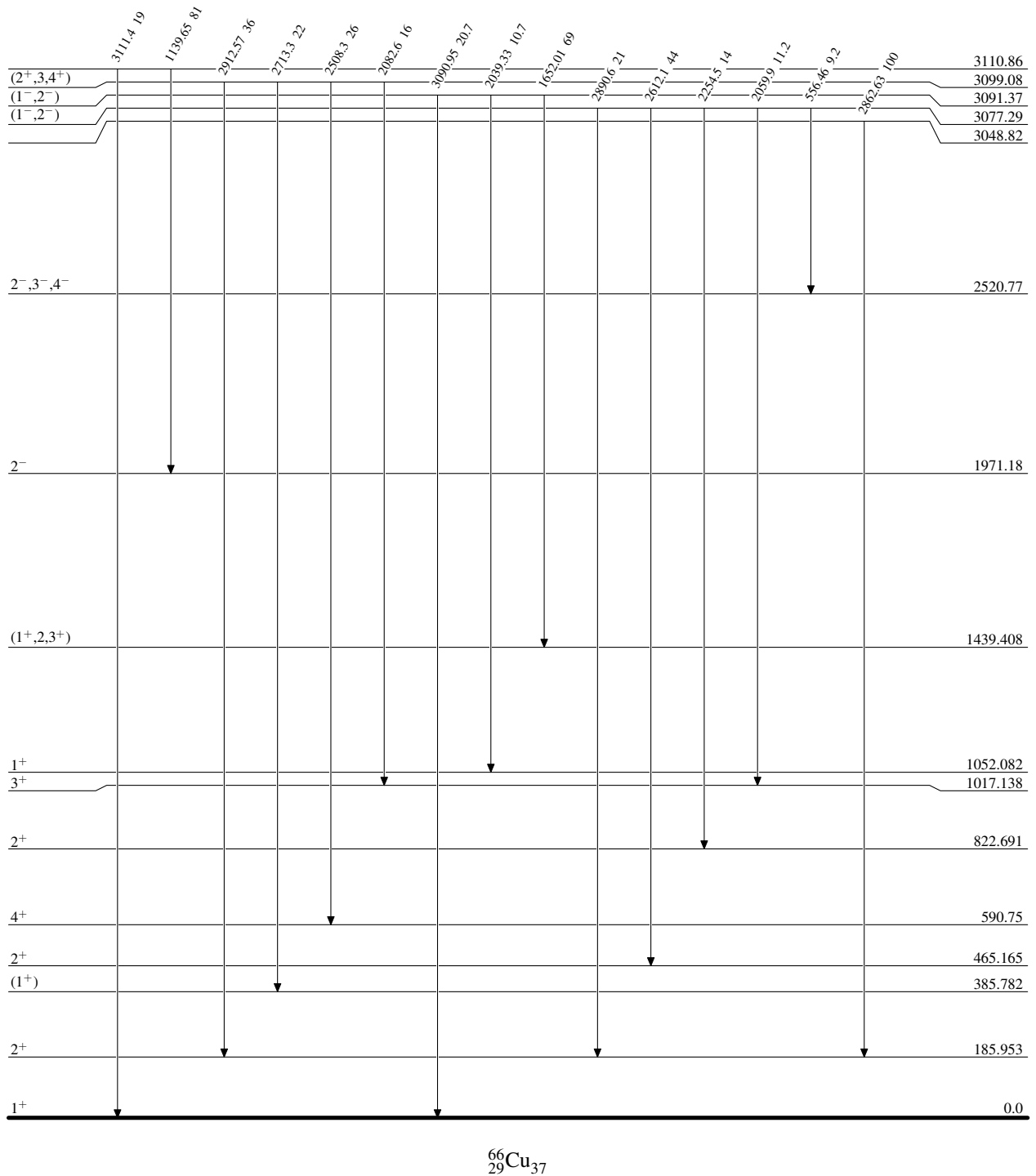
Intensities: % photon branching from each level

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

${}^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ 1983De29

Level Scheme (continued)

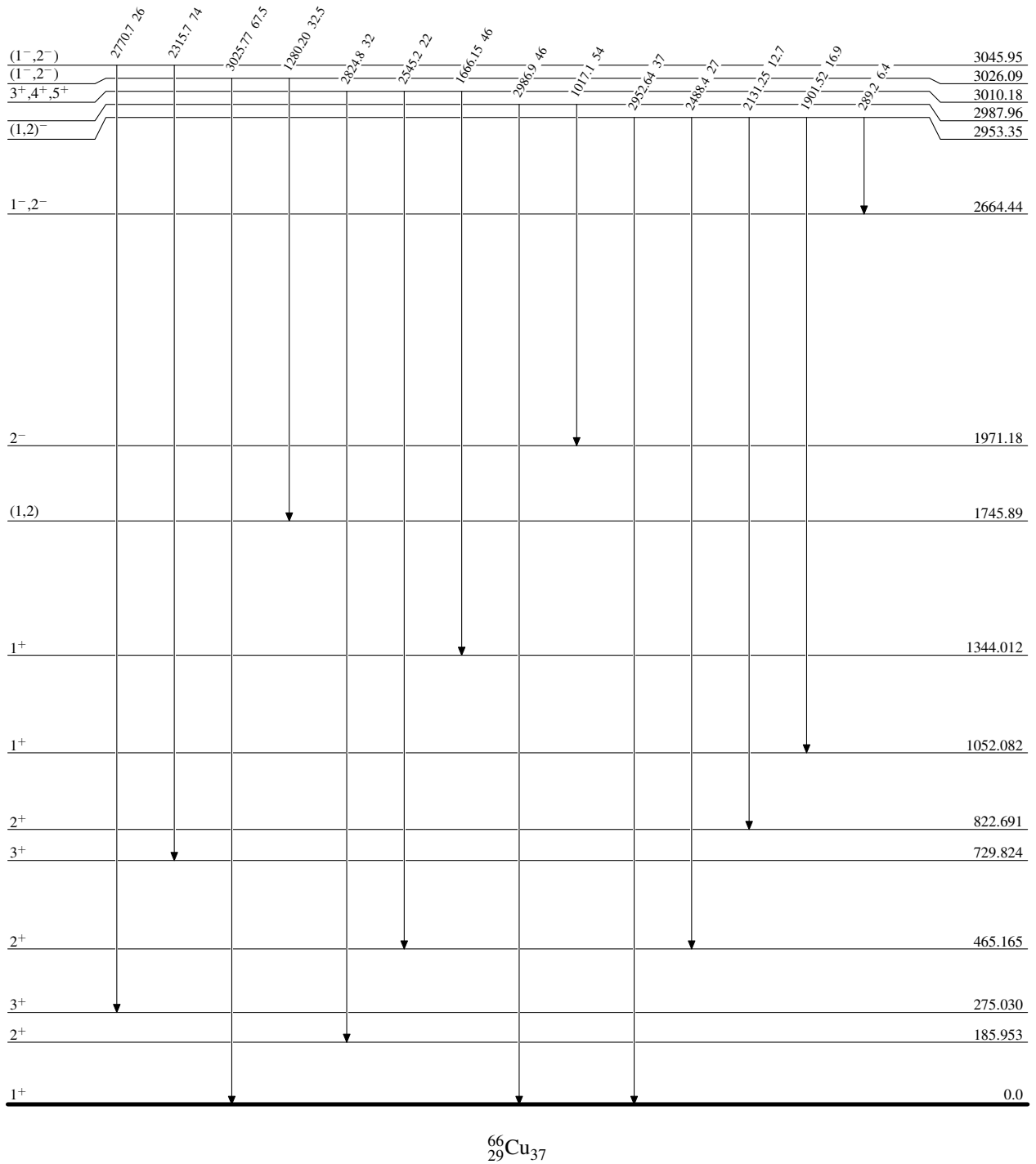
Intensities: % photon branching from each level

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

$^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ 1983De29

Level Scheme (continued)

Intensities: % photon branching from each level

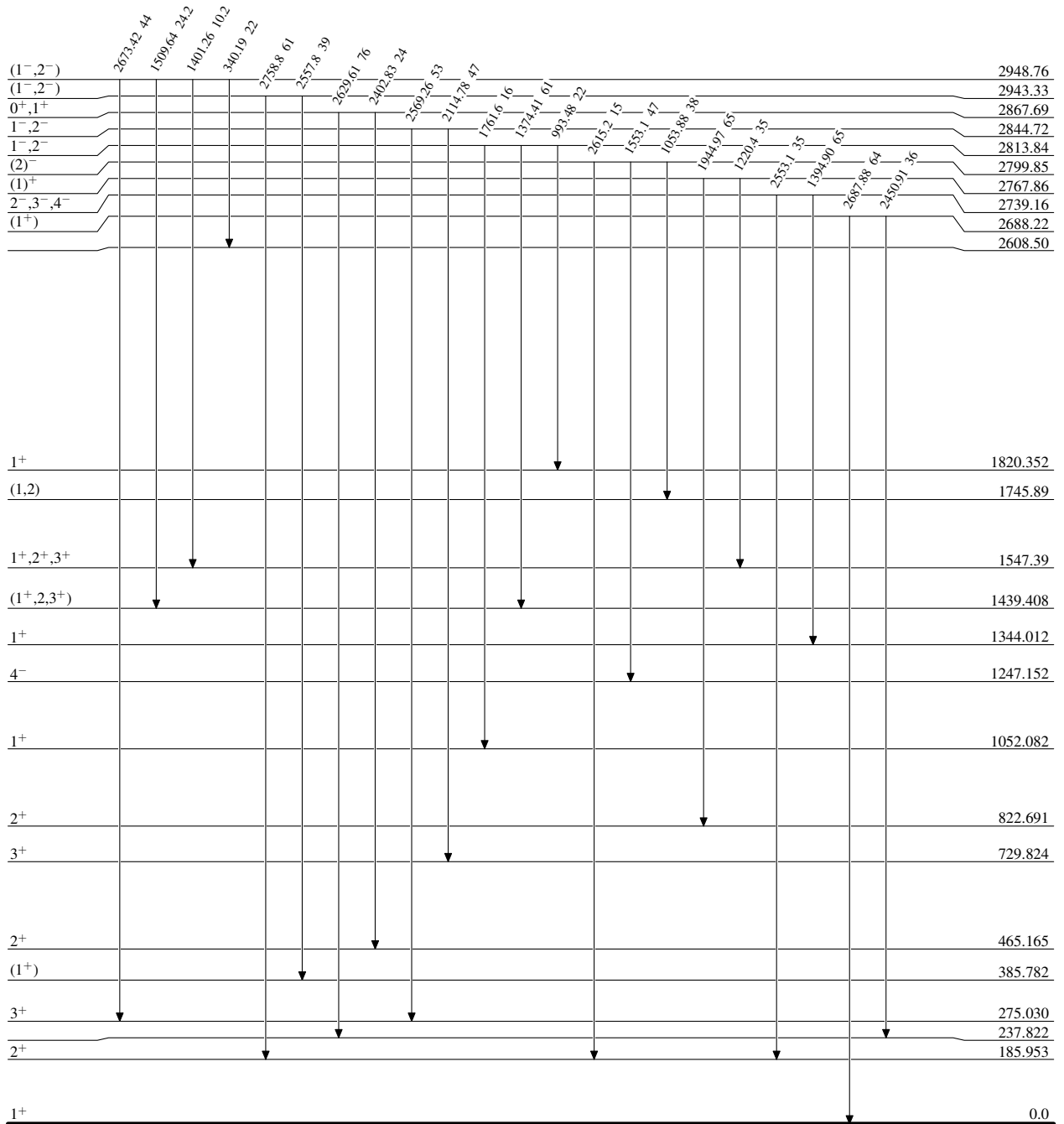


$^{66}_{29}\text{Cu}_{37}$

$^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV} \quad 1983\text{De29}$

Level Scheme (continued)

Intensities: % photon branching from each level

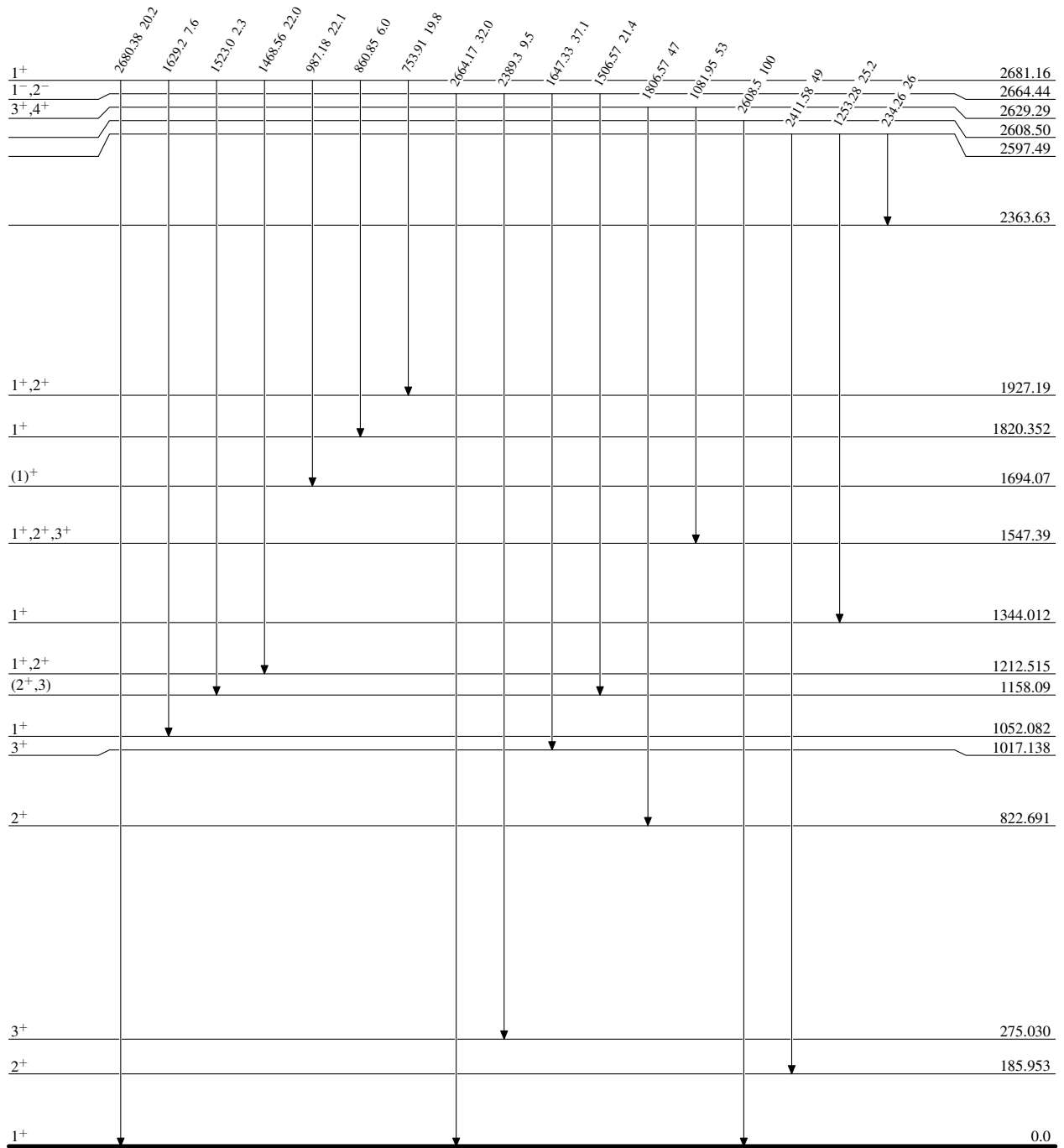


$^{66}_{29}\text{Cu}_{37}$

$^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ 1983De29

Level Scheme (continued)

Intensities: % photon branching from each level

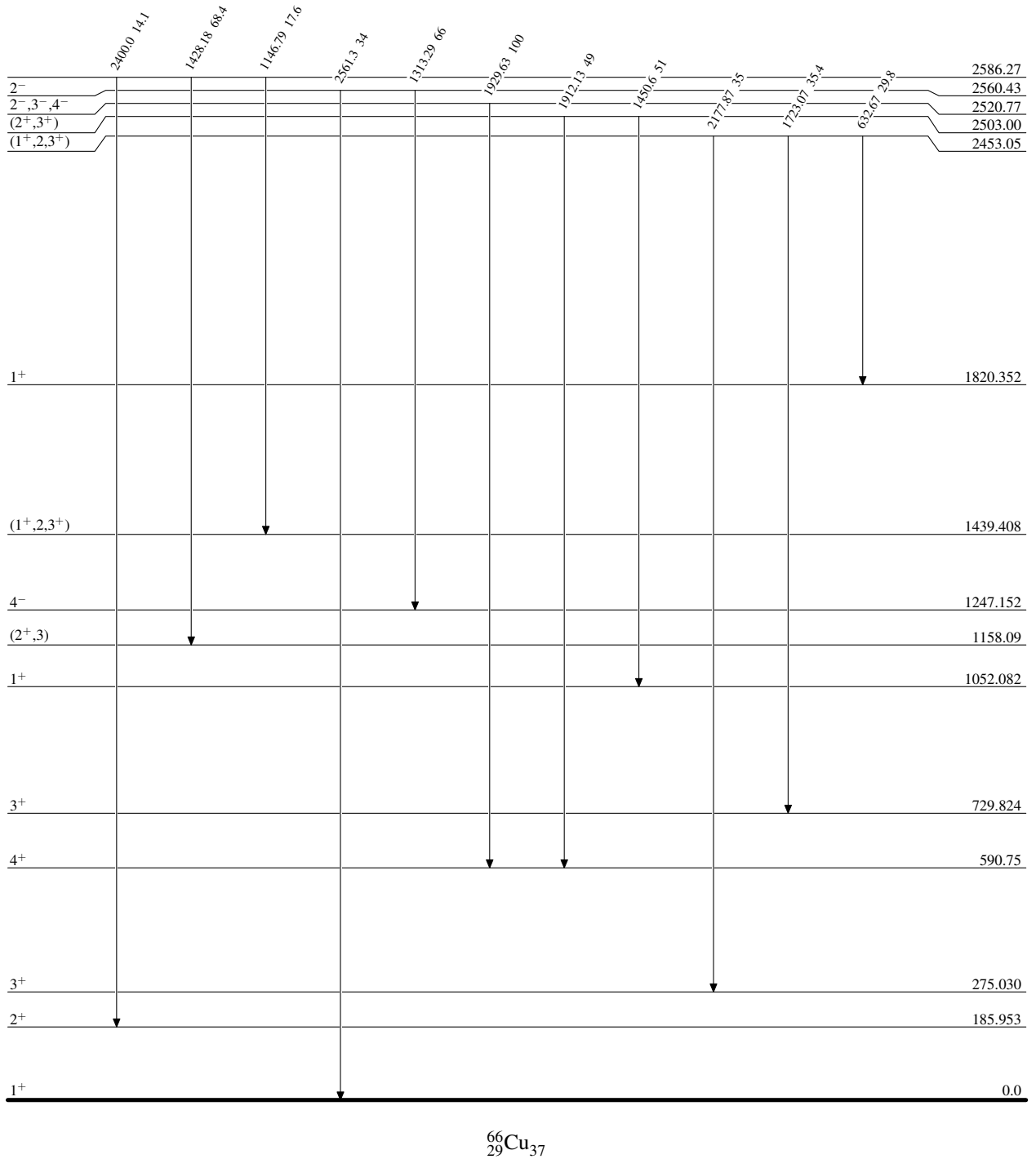


$^{66}_{29}\text{Cu}_{37}$

$^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ 1983De29

Level Scheme (continued)

Intensities: % photon branching from each level

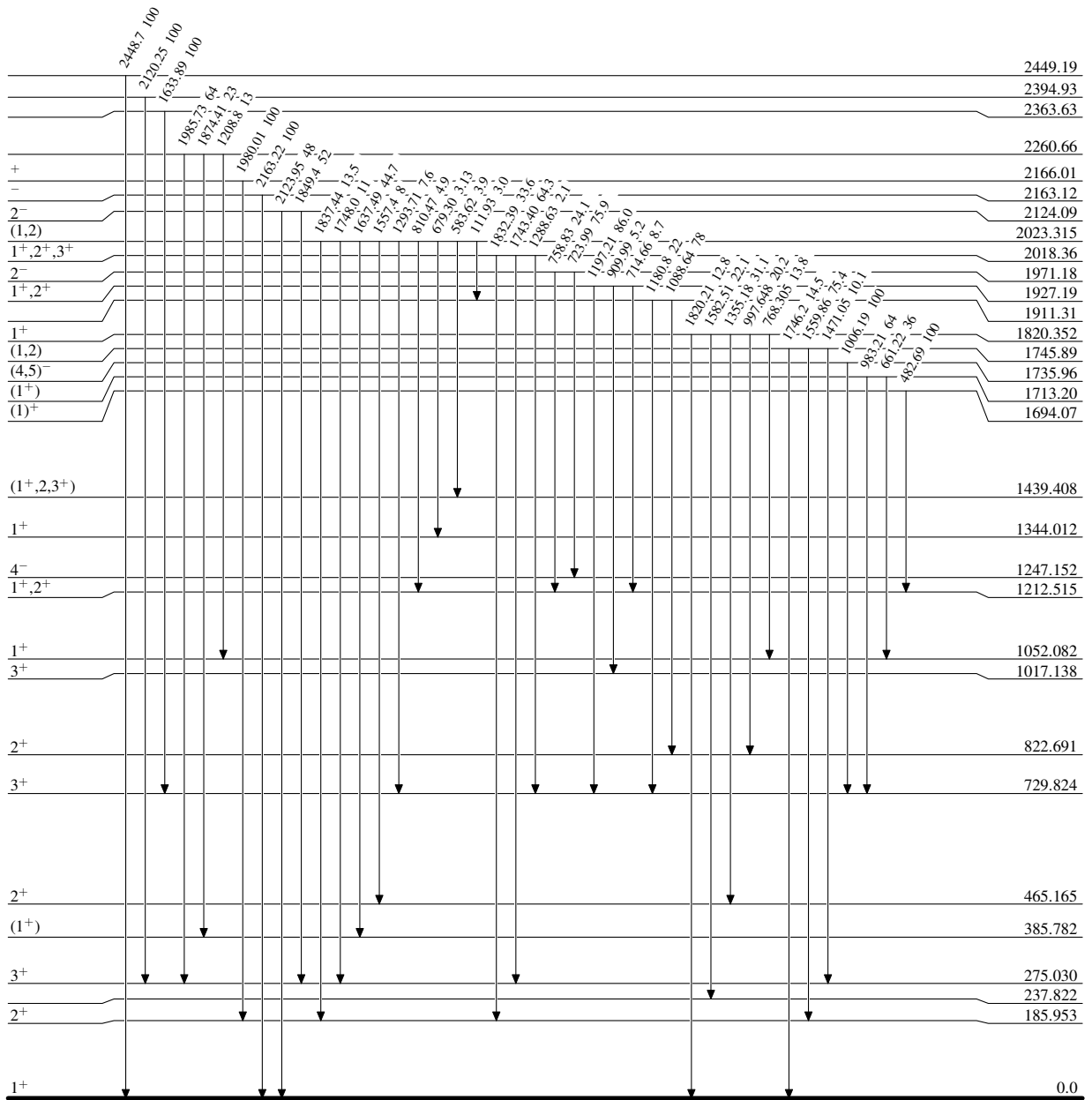


$^{66}_{29}\text{Cu}_{37}$

$^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ 1983De29

Level Scheme (continued)

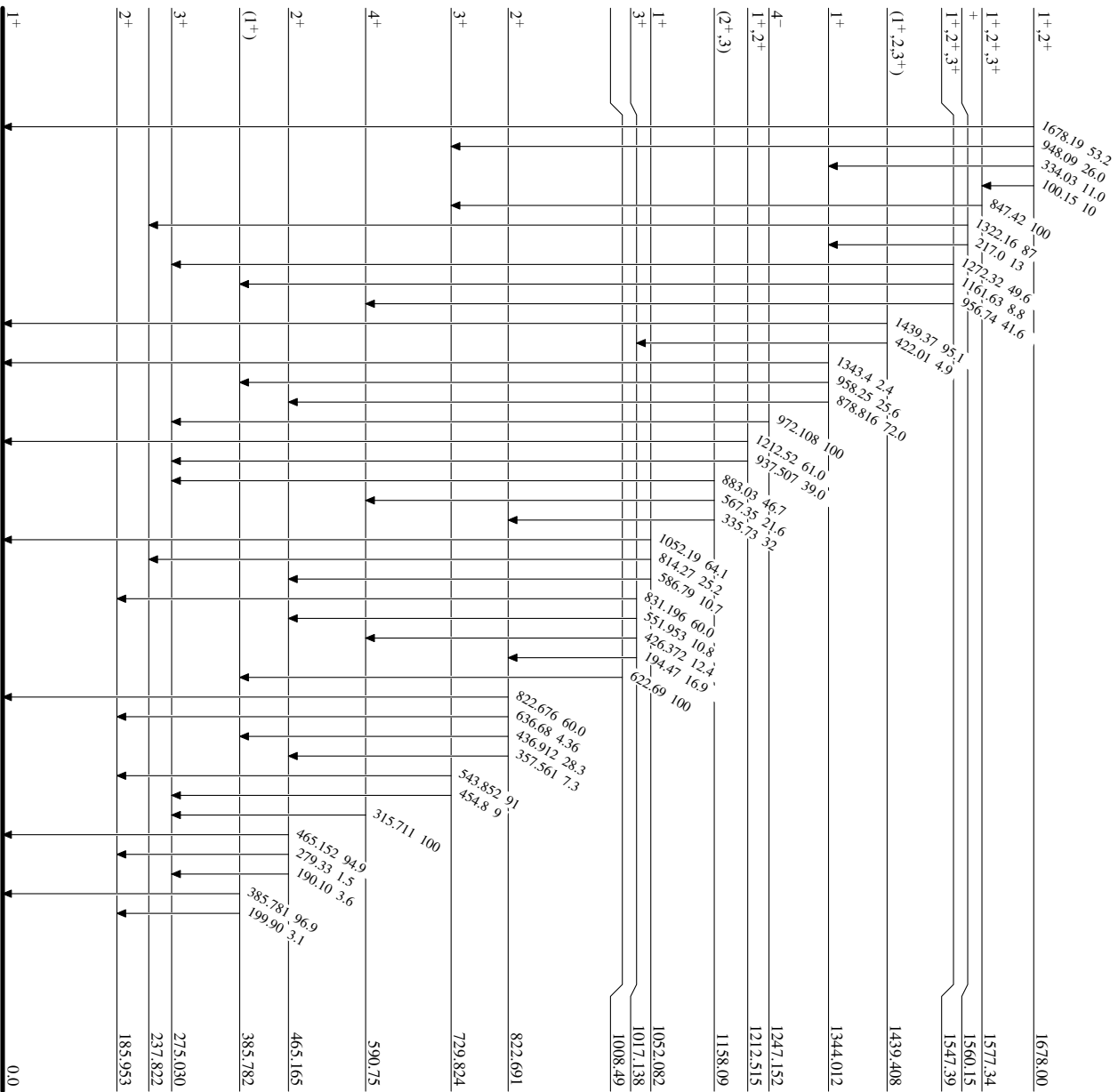
Intensities: % photon branching from each level



⁶⁵Cu(n,γ) E=2, 24 keV 1983De29

Level Scheme (continued)

Intensities: % photon branching from each level

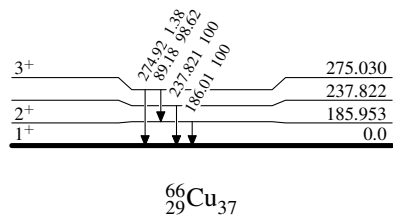


⁶⁶Cu₃₇

${}^{65}\text{Cu}(n,\gamma) E=2, 24 \text{ keV}$ 1983De29

Level Scheme (continued)

Intensities: % photon branching from each level

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