^{141}Pr(n,γ) E=thermal 1985AlZN,1981Ke11,1968Ke08

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	T. D. Johnson, D. Symochko(a), M. Fadil(b), and J. K. Tuli	NDS 112, 1949 (2011)	1-Jun-2010

Measured: γ, $\gamma\gamma$, ce (1985AlZN,1984AlZK); γ (1981Ke11,1970Or05,1968Ke08); CP(γ) in (n,γ) with polarized n (1970Ei04); $\gamma(\theta$,H,t) (1970Me21).
Others: 1966Hu15, 1964Pa21, 1963Gi14, 1962Gr37, 1953Ba76.

^{142}Pr Levels

E(level)†#	Jπ‡	E(level)†#	E(level)†#	E(level)†#	Jπ‡
0.0	2$^-$	1470.55 *10*	1895.99 *10*	2141.57 *10*	
3.6815 *11*	5$^-$	1495.46 *10*	1901.90 *10*	2148.20 *10*	
17.7399 *8*	3$^-$	1499.38 *10*	1913.93 *10*	2151.45 *10*	
63.7446 *19*	6$^-$	1511.84 *10*	1920.02 *10*	2152.83 *10*	
72.2932 *18*	4$^-$	1517.59 *10*	1922.77 *10*	2164.74 *10*	
84.998 *3*	1$^-$	1527.38 *10*	1927.93 *10*	2167.62 *10*	
89.7507 *14*	(6$^-$)	1538.46 *10*	1932.01 *10*	2178.75 *10*	
128.2497 *25*	5$^-$	1540.43 *10*	1940.60 *10*	2183.27 *10*	
144.5862 *21*	4$^-$	1564.08 *10*	1950.47 *10*	2184.96 *10*	
176.8630 *23*	(3)$^-$	1566.54 *10*	1953.72 *10*	2188.63 *10*	
200.525 *4*	(2)$^-$	1590.95 *10*	1959.10 *10*	2191.37 *10*	
358.09 *10*	(7$^-$)	1599.22 *10*	1969.18 *10*	2192.90 *10*	
631.498 *5*	1$^-$,2$^-$,3$^-$	1616.30 *10*	1971.40 *10*	2197.28 *10*	
636.96 *3*	4$^-$	1622.81 *10*	1974.66 *10*	2200.58 *10*	
702.32 *4*		1639.88 *10*	1980.23 *10*	2212.25 *10*	
705.12 *4*	3$^-$,4$^-$	1650.28 *10*	1984.88 *10*	2213.91 *10*	
746.94 *4*	2$^-$,3$^-$	1666.09 *10*	1993.29 *10*	2223.09 *10*	
790.33 *3*	2$^-$,3$^-$	1679.20 *10*	2012.81 *10*	2227.85 *10*	
822.80 *3*	2$^-$,3$^-$	1683.58 *10*	2017.43 *10*	2232.51 *10*	
889.983 *4*		1693.16 *10*	2022.67 *10*	2240.59 *10*	
978.15 *3*	2$^-$,3$^-$	1709.05 *10*	2028.12 *10*	2243.96 *10*	
1041.82 *4*	2$^-$,3$^-$	1722.32 *10*	2031.40 *10*	2252.07 *10*	
1072.34 *4*	2$^-$,3$^-$	1733.59 *10*	2037.10 *10*	2255.26 *10*	
1111.790 *7*	3$^-$,4$^-$	1747.43 *10*	2043.06 *10*	2260.63 *10*	
1114.61[@] *10*		1752.94 *10*	2048.01 *10*	2268.28 *10*	
1120.19 *4*	3$^-$,4$^-$	1758.70 *10*	2052.73 *10*	2274.06 *10*	
1150.93 *4*	2$^-$,3$^-$	1764.38 *10*	2058.00 *10*	2277.04 *10*	
1157.34[&] *10*		1769.23 *10*	2060.78 *10*	2278.18 *10*	
1158.81[a] *10*		1785.03 *10*	2066.64 *10*	2279.88 *10*	
1175.92 *4*		1793.17 *10*	2071.21 *10*	2286.26 *10*	
1182.39 *10*		1798.23 *10*	2074.75 *10*	2293.40 *10*	
1250.80 *10*		1807.11 *10*	2080.84 *10*	2307.78 *10*	
1263.44 *10*		1813.71 *10*	2092.21 *10*	2310.27 *10*	
1290.52 *10*		1824.05 *10*	2096.63 *10*	2316.06 *10*	
1346.64 *10*		1826.46 *10*	2100.64 *10*	2320.46 *10*	
1381.50 *10*		1830.88 *10*	2106.94 *10*	2328.69 *10*	
1393.82 *10*		1842.11 *10*	2115.07 *10*	2334.35 *10*	
1402.54 *10*		1875.58 *10*	2126.83 *10*	5843.14[b] *10*	3$^+$,2$^+$[b]
1460.12 *10*		1880.31 *10*	2129.37 *10*		
1466.42 *10*		1883.53 *10*	2133.46 *10*		

† Uncertainties assumed 0.10 keV, when not available.
‡ Adopted values.
# E<1176 with assigned J are from 1985AlZN. Level energies from least-squares fit to Eγ, holding levels with no decaying γ fixed.

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^{141}Pr(n,γ) E=thermal 1985AlZN,1981Ke11,1968Ke08 (continued)

^{142}Pr Levels (continued)

@ From 1981Ke11.
& See comment to 1158.81 level.
a From 1981Ke11; 1985AlZN report only one level at 1158.148 *22* instead of levels at 1157.34 and 1158.81.
b n-capture state.

γ(^{142}Pr)

E_γ‡	I_γ†‡	E_i(level)	J_i^π	E_f	J_f^π
32.278 *6*	0.5	176.8630	(3)$^-$	144.5862	4$^-$
x47.3 *6*	0.3				
54.568 *8*	0.2	72.2932	4$^-$	17.7399	3$^-$
55.950 *7*	0.13	128.2497	5$^-$	72.2932	4$^-$
60.064 *2*	0.8	63.7446	6$^-$	3.6815	5$^-$
64.506 *2*	0.8	128.2497	5$^-$	63.7446	6$^-$
68.610 *2*	0.9 *5*	72.2932	4$^-$	3.6815	5$^-$
84.998 *3*	1.4	84.998	1$^-$	0.0	2$^-$
x86.056 *3*	1.0				
104.569 *4*	0.35 *14*	176.8630	(3)$^-$	72.2932	4$^-$
115.529 *5*	0.41 *10*	200.525	(2)$^-$	84.998	1$^-$
124.565 *6*	0.27@ *3*	128.2497	5$^-$	3.6815	5$^-$
126.845 *3*	2.8 *6*	144.5862	4$^-$	17.7399	3$^-$
x132.55 *3*	0.025				
x137.47 *4*	0.07				
140.906 *3*	4.1 *8*	144.5862	4$^-$	3.6815	5$^-$
153.15 *6*	0.11 *3*	790.33	2$^-$,3$^-$	636.96	4$^-$
159.11 *6*	0.059@ *12*	176.8630	(3)$^-$	17.7399	3$^-$
x159.33 *6*	0.041@ *8*				
176.863& *3*	9.7 *20*	176.8630	(3)$^-$	0.0	2$^-$
182.785 *5*	3.8 *9*	200.525	(2)$^-$	17.7399	3$^-$
185.96 *3*	0.16@ *4*	822.80	2$^-$,3$^-$	636.96	4$^-$
187.79 *2*	0.44@ *11*	978.15	2$^-$,3$^-$	790.33	2$^-$,3$^-$
200.520 *14*	0.34 *7*	200.525	(2)$^-$	0.0	2$^-$
x221.3 *10*	0.08 *2*				
231.21 *7*	0.13 *4*	978.15	2$^-$,3$^-$	746.94	2$^-$,3$^-$
x244.5#	0.10# *2*				
251.50 *13*	0.16 *4*	1041.82	2$^-$,3$^-$	790.33	2$^-$,3$^-$
268.34 *10*	0.15 *4*	358.09	(7$^-$)	89.7507	(6$^-$)
x278.38 *15*	0.17@ *4*				
x281.6#	0.07# *2*				
294.81 *17*	0.27 *6*	1041.82	2$^-$,3$^-$	746.94	2$^-$,3$^-$
x327.5#	0.16# *3*				
x334.1 *7*	0.20 *5*				
x337.9 *7*	0.11				
x341.58 *3*	0.73@ *10*				
x352.75 *12*	0.18 *5*				
360.62 *12*	0.28 *7*	1150.93	2$^-$,3$^-$	790.33	2$^-$,3$^-$
x377.8#	0.10# *2*				
x384.4#	0.17# *4*				
403.7 *3*	0.32 *8*	1150.93	2$^-$,3$^-$	746.94	2$^-$,3$^-$
415.9 *10*	0.09 *4*	1120.19	3$^-$,4$^-$	705.12	3$^-$,4$^-$
x431.5 *3*	0.40 *9*				
x439.8 *7*	0.3 *1*				

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^{141}Pr(n,γ) E=thermal 1985AlZN,1981Ke11,1968Ke08 (continued)

γ(^{142}Pr) (continued)

E_γ ‡	I_γ †‡	E_i(level)	J_i^π	E_f	J_f^π
x449.3 7	0.34 10				
460.0 4	0.95 20	636.96	4−	176.8630	(3)−
509.0 4	1.5	636.96	4−	128.2497	5−
x516.6 6	1.3@ 3				
527.83 19	0.43 15	705.12	3−,4−	176.8630	(3)−
546.38 19	1.6 4	746.94	2−,3−	200.525	(2)−
557.4 3	1.4 4	702.32		144.5862	4−
560.2 3	1.1 3	705.12	3−,4−	144.5862	4−
569.9 6	1.0 3	746.94	2−,3−	176.8630	(3)−
573.4 3	1.1 3	636.96	4−	63.7446	6−
x612.2 4	1.7 4				
620.2 6	2.0 5	636.96	4−	17.7399	3−
631.2 7	1.5 5	702.32		72.2932	4−
634.2 7	1.3 4	636.96	4−	3.6815	5−
645.7 13	3.4 7	790.33	2−,3−	144.5862	4−
x654.9 4	0.7				
x663.6 8	0.20 6				
687.2 8	0.9 2	702.32		17.7399	3−
699.8 6	2.0 5	702.32		3.6815	5−
705.5 8	0.7 2	790.33	2−,3−	84.998	1−
718.6 6	0.50 15	790.33	2−,3−	72.2932	4−
729.5 6	0.9 2	746.94	2−,3−	17.7399	3−
738.0 7	0.60 15	822.80	2−,3−	84.998	1−
747.6 5	1.8 4	746.94	2−,3−	0.0	2−
753.1 15	0.2 1	822.80	2−,3−	72.2932	4−
771.3 8	0.40 15	790.33	2−,3−	17.7399	3−
790.5 6	0.6 2	790.33	2−,3−	0.0	2−
801.1 7	0.9 3	978.15	2−,3−	176.8630	(3)−
805.6 8	0.5 2	822.80	2−,3−	17.7399	3−
x817.2 15	0.20 7				
823.4 8	0.4 1	822.80	2−,3−	0.0	2−
x832.1 9	0.3 1				
x844.3 10	0.3 1				
866.2 6	1.3 3	1041.82	2−,3−	176.8630	(3)−
x879.7 10	0.8 2				
894.1 6	1.0 3	978.15	2−,3−	84.998	1−
x920.0#	0.21# 4				
x936.5 8	0.8 3				
x943.7 9	0.8 2				
957.5 7	1.4 3	1041.82	2−,3−	84.998	1−
x966.7 25	0.40 16				
975.8a 15	0.7a 2	978.15	2−,3−	3.6815	5−
975.8a 15	0.7a 2	1120.19	3−,4−	144.5862	4−
975.8a 15	0.7a 2	1150.93	2−,3−	176.8630	(3)−
991.2 6	1.6 4	1120.19	3−,4−	128.2497	5−
1005.4 6	2.1 5	1150.93	2−,3−	144.5862	4−
1024.7 8	0.30 12	1041.82	2−,3−	17.7399	3−
1101.9 8	0.7 3	1120.19	3−,4−	17.7399	3−
x1107.9 7	1.3 4				
x1131.1 12	0.6 2				
x1138.1 12	0.7 2				
1150.7 6	2.3 5	1150.93	2−,3−	0.0	2−
x1157.7 9	0.9 3				
x1163.0 8	1.0 3				
x1218.1#	0.38# 8				
x1231.2#	0.58# 12				
x1248.5#	0.31# 6				
x1273.5#	0.47# 10				
x1318.3#	0.70# 14				
x1328.2#	0.30# 6				
x1331.8 12	1.1 3				
x1413.1 8	0.7 3				
x1450 3	0.9 3				
x1467.4 7	1.5 5				
x1577.7#	1.41# 28				
x1683.8#	0.95# 19				
x1702.8#	0.38# 8				
x1796.6#	0.97# 20				
x1889.8#	0.58# 12				
x1943.3#	0.28# 6				
x2244.6#	0.24# 5				
x2257.6#	0.13# 3				
x2285.0#	0.21# 4				
x2288.5#	0.19# 4				
x2330.57 7	0.036 2				
x2342.31 6	0.060 4				
x2346.70 6	0.054 3				
x2348.25 6	0.082 5				
x2350.51 5	0.114 6				
x2356.36 6	0.057 3				
x2358.57 8	0.024 2				
x2371.73 7	0.038 2				
x2374.78 7	0.031 2				
x2378.46 6	0.058 3				
x2380.29 8	0.028 2				
x2386.46 6	0.052 3				
x2387.92 5	0.105 6				
x2390.50 6	0.049 3				
x2396.68 5	0.092 5				
x2398.16 7	0.039 2				
x2400.09 9	0.018 1				
x2402.74 5	0.094 5				
x2404.58 6	0.064 4				
x2410.61 5	0.142 8				
x2416.35 6	0.074 4				
x2417.50 5	0.134 7				
x2423.86 7	0.035 2				
x2425.47 7	0.040 3				
x2432.24 7	0.030 2				
x2434.01 5	0.166 9				
x2435.55 7	0.029 2				
x2438.67 5	0.142 8				
x2441.57 5	0.085 5				
x2442.97 6	0.072 4				
x2444.76 6	0.050 3				
x2450.51 5	0.107 6				
x2458.14 7	0.035 2				
x2461.62 5	0.079 5				

^{141}Pr(n,γ) E=thermal 1985AlZN,1981Ke11,1968Ke08 (continued)

γ(^{142}Pr) (continued)

E_γ ‡	I_γ †‡	E_i(level)	J_i^π	E_f	J_f^π	E_γ ‡	I_γ †‡	E_i(level)
x1177.9#	0.57# *12*					x2465.39 *7*	0.036 *2*	

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^{141}Pr(n,γ) E=thermal 1985AlZN,1981Ke11,1968Ke08 (continued)

γ(^{142}Pr) (continued)

E_γ ‡	I_γ †‡	E_i(level)	E_γ ‡	I_γ †‡	E_i(level)	E_γ ‡	I_γ †‡	E_i(level)
x2467.34 6	0.042 3		x2642.29 7	0.029 2		x2849.06 5	0.060 3	
x2469.19 5	0.214 12		x2644.34 6	0.044 3		x2851.84 7	0.020 1	
x2472.02 6	0.056 3		x2645.52 4	0.201 11		x2854.35 6	0.030 2	
x2474.76 6	0.066 4		x2649.45 5	0.158 9		x2865.35 5	0.121 7	
x2477.17 5	0.144 8		x2650.38 5	0.096 5		x2869.42 5	0.049 3	
x2482.33 5	0.230 12		x2653.24 8	0.016 1		x2873.21 5	0.054 3	
x2487.01 8	0.019 1		x2655.83 7	0.021 1		x2875.44 5	0.096 5	
x2491.84 5	0.077 4		x2658.50 5	0.110 6		x2877.19 7	0.017 1	
x2494.82 6	0.070 4		x2663.55 6	0.041 2		x2881.89 7	0.017 1	
x2501.08 9	0.017 1		x2665.73 5	0.086 5		x2884.21 6	0.034 2	
x2503.87 6	0.050 3		x2667.97 7	0.029 2		x2890.76 5	0.090 5	
x2506.64 7	0.026 2		x2670.18 9	0.013 1		x2894.53 5	0.131 7	
x2510.46 6	0.039 2		x2671.96 5	0.103 6		x2898.31 5	0.064 4	
x2512.79 5	0.076 4		x2678.29 7	0.021 1		x2899.71 6	0.032 2	
x2515.66 6	0.061 4		x2679.93 6	0.039 2		x2903.33 5	0.123 7	
x2518.43 9	0.015 1		x2683.44 9	0.014 1		x2905.18 5	0.080 4	
x2524.83 9	0.016 1		x2685.52 9	0.013 1		x2910.89 5	0.061 3	
x2527.03 5	0.109 6		x2687.86 5	0.139 8		x2913.29 6	0.027 2	
x2529.99 7	0.034 2		x2689.01 6	0.039 2		x2917.38 8	0.012 1	
x2532.18 5	0.121 7		x2690.63 5	0.063 4		x2919.38 5	0.094 5	
x2534.53 6	0.067 4		x2694.28 6	0.038 2		x2926.86 5	0.110 6	
x2540.47 6	0.040 2		x2698.91 7	0.025 2		x2933.56 5	0.056 3	
x2543.16 5	0.135 7		x2700.79 6	0.037 2		x2935.76 5	0.104 6	
x2544.95 8	0.018 1		x2702.06 7	0.028 2		x2941.22 5	0.055 3	
x2547.35 6	0.054 3		x2706.09 6	0.042 2		x2943.61 4	0.322 17	
x2548.66 5	0.131 7		x2709.47 7	0.023 2		x2948.15 4	0.257 14	
x2553.03 5	0.171 9		x2710.97 5	0.156 8		x2952.69 5	0.136 7	
x2556.00 8	0.023 2		x2714.18	0.010 1		x2958.94 5	0.068 4	
x2558.27 5	0.148 8		x2715.71 5	0.081 5		x2960.62 5	0.091 5	
x2561.43 4	0.297 16		x2716.80 8	0.018 1		x2964.85 6	0.029 2	
x2564.72 5	0.138 8		x2719.10 5	0.081 5		x2972.96 5	0.136 7	
x2566.18 9	0.016 1		x2723.50 5	0.123 7		x2975.17 6	0.024 2	
x2567.10 5	0.080 5		x2726.17 4	0.210 11		x2977.69 5	0.074 4	
x2569.78 5	0.068 4		x2736.11 5	0.073 4		x2981.10 5	0.061 3	
x2572.81 5	0.096 5		x2740.24 6	0.050 3		x2982.93 5	0.052 3	
x2576.08 6	0.060 4		x2742.19 8	0.015 1		x2986.73 5	0.051 3	
x2582.63 5	0.179 10		x2743.90 5	0.098 5		x2989.90 8	0.014 1	
x2585.84 6	0.047 3		x2746.80 6	0.048 3		x2992.67 7	0.019 1	
x2591.99 7	0.026 2		x2750.17 7	0.022 1		x2994.23 6	0.025 2	
x2593.74 5	0.129 7		x2754.42 5	0.109 6		x2997.24 4	0.273 14	
x2596.77 5	0.069 4		x2756.63 5	0.106 6		x2998.26 5	0.080 4	
x2598.78 4	0.342 18		x2760.79 5	0.066 4		x3001.04 5	0.049 3	
x2602.19 6	0.049 3		x2761.71 5	0.092 5		x3003.49 5	0.053 3	
x2605.08 9	0.014 1		x2764.80 5	0.074 4		x3006.11 7	0.015 1	
x2608.30 5	0.139 8		x2771.80 6	0.039 2		x3009.84 5	0.133 7	
x2610.51 8	0.017 1		x2774.73 5	0.053 3		x3012.87 7	0.018 1	
x2613.67 6	0.052 3		x2779.21 5	0.072 4		x3015.58 6	0.033 2	
x2616.38 5	0.062 4		x2784.37 6	0.037 2		x3018.48 8	0.011 1	
x2619.25 5	0.146 8		x2788.86 5	0.119 6		x3026.74 5	0.096 5	
x2621.56 5	0.073 4		x2795.97 5	0.164 9		x3030.42 5	0.102 6	
x2625.24 5	0.082 5		x2799.10 5	0.075 4		x3035.53 5	0.043 2	
x2627.74 6	0.044 3		x2803.93 5	0.082 5		x3040.00 5	0.057 3	
x2633.02 5	0.109 6		x2805.00 5	0.152 8		x3044.42 5	0.046 3	
x2634.50 7	0.027 2		x2830.13 6	0.031 2		x3052.44 4	0.235 12	
x2636.16 6	0.047 3		x2837.90 4	0.334 18		x3063.18 4	0.275 14	
x2638.36 6	0.050 3		x2841.77 4	0.189 10		x3069.46 7	0.020 1	
x2640.99 5	0.149 8		x2846.05 5	0.144 8		x3075.36 8	0.011 1	

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^{141}Pr(n,γ) E=thermal 1985AlZN,1981Ke11,1968Ke08 (continued)

γ(^{142}Pr) (continued)

E_γ ‡	I_γ †‡	E_i(level)	E_γ ‡	I_γ †‡	E_i(level)	J_i^π	E_f
x3077.21 5	0.053 3		x3327.40 5	0.063 3			
x3082.27 5	0.054 3		x3330.50 7	0.014 1			
x3085.67 8	0.012 1		x3335.40 5	0.100 5			
x3089.35 4	0.170 9		x3338.49 5	0.069 4			
x3091.99 5	0.062 3		x3344.98 7	0.013 1			
x3098.16 4	0.141 8		x3348.66 7	0.015 1			
x3101.10 6	0.024 1		x3350.45 4	0.194 10			
x3102.50 5	0.040 2		x3354.42 5	0.071 4			
x3104.93 6	0.022 1		x3359.36 5	0.062 3			
x3112.64 5	0.065 4		x3364.04 5	0.092 5			
x3115.44 4	0.138 7		x3365.54 4	0.304 16			
x3118.42 6	0.020 1		x3368.16 5	0.061 3			
x3120.25 7	0.014 1		x3375.18 4	0.112 6			
x3122.50 5	0.116 6		x3381.08 5	0.083 4			
x3124.89 5	0.050 3		x3385.19 4	0.109 6			
x3132.08 4	0.140 7		x3395.56 5	0.087 5			
x3133.04 5	0.041 2		x3398.62 5	0.035 2			
x3137.25 4	0.220 12		x3402.82 5	0.094 5			
x3150.63 4	0.195 10		x3408.51 4	0.189 10			
x3153.91 5	0.043 2		x3415.22 5	0.066 4			
x3162.76 5	0.068 4		x3418.58 5	0.033 2			
x3165.97 7	0.017 1		x3425.05 6	0.022 1			
x3168.91 6	0.031 2		x3426.92 4	0.197 10			
x3170.69 5	0.067 4		x3430.58 5	0.035 2			
x3183.26 7	0.017 1		x3439.27 5	0.042 2			
x3186.59 6	0.023 1		x3441.82 6	0.019 1			
x3193.53 4	0.154 8		x3446.77 5	0.049 3			
x3196.71 5	0.060 3		x3453.73 4	0.106 6			
x3200.13 7	0.015 1		x3461.37 8	0.010 1			
x3204.04 6	0.020 1		x3464.54 7	0.012 1			
x3207.16 6	0.029 2		x3467.26 4	0.243 13			
x3215.65 5	0.059 3		x3474.22 6	0.027 2			
x3216.80 4	0.149 8		x3477.48 5	0.036 2			
x3220.89 5	0.086 5		x3482.45 4	0.179 9			
x3226.97 4	0.240 13		x3490.86 4	0.123 7			
x3232.88 4	0.150 8		x3502.63 4	0.094 5			
x3235.46 5	0.096 5		3508.76 5	0.045 2	5843.14	$3^+,2^+$	2334.35
x3238.90 8	0.011 1		3514.42 7	0.014 1	5843.14	$3^+,2^+$	2328.69
x3243.31 4	0.115 6		3522.65 5	0.081 4	5843.14	$3^+,2^+$	2320.46
x3252.90 7	0.016 1		3527.05 5	0.045 2	5843.14	$3^+,2^+$	2316.06
x3255.93 5	0.104 6		3532.83 4	0.207 11	5843.14	$3^+,2^+$	2310.27
x3261.00 5	0.080 4		3535.33 4	0.311 16	5843.14	$3^+,2^+$	2307.78
x3266.89 4	0.217 11		3549.71 4	0.338 18	5843.14	$3^+,2^+$	2293.40
x3270.12 6	0.029 2		3556.85 4	0.143 8	5843.14	$3^+,2^+$	2286.26
x3272.05 6	0.029 2		3563.23 4	0.110 6	5843.14	$3^+,2^+$	2279.88
x3277.26 4	0.315 16		3564.93 5	0.037 2	5843.14	$3^+,2^+$	2278.18
x3285.31 4	0.273 14		3566.07 6	0.025 1	5843.14	$3^+,2^+$	2277.04
x3288.77 7	0.014 1		3569.04 5	0.041 2	5843.14	$3^+,2^+$	2274.06
x3293.76 5	0.093 5		3574.82 6	0.018 1	5843.14	$3^+,2^+$	2268.28
x3297.83 7	0.017 1		3582.48 4	0.218 11	5843.14	$3^+,2^+$	2260.63
x3300.56 7	0.016 1		3587.84 4	0.136 7	5843.14	$3^+,2^+$	2255.26
x3307.07 4	0.260 14		3591.03 4	0.097 5	5843.14	$3^+,2^+$	2252.07
x3311.58 5	0.040 2		3599.14 4	0.128 7	5843.14	$3^+,2^+$	2243.96
x3313.21 4	0.125 7		3602.51 4	0.59 3	5843.14	$3^+,2^+$	2240.59
x3314.24 5	0.104 6		3610.59 5	0.033 2	5843.14	$3^+,2^+$	2232.51
x3315.86 5	0.075 4		3615.26 6	0.024 1	5843.14	$3^+,2^+$	2227.85
x3317.16 5	0.069 4		3620.02 4	0.140 7	5843.14	$3^+,2^+$	2223.09

Continued on next page (footnotes at end of table)

^{141}Pr(n,γ) E=thermal 1985AlZN,1981Ke11,1968Ke08 (continued)

γ(^{142}Pr) (continued)

E_γ[‡]	I_γ[†‡]	E_i(level)	J_i^π	E_f	E_γ[‡]	I_γ[†‡]	E_i(level)	J_i^π	E_f	J_f^π
3629.19 *4*	0.091 *5*	5843.14	3+,2+	2213.91	3959.56 *6*	0.012 *1*	5843.14	3+,2+	1883.53	
3630.85 *4*	0.115 *6*	5843.14	3+,2+	2212.25	3962.79 *5*	0.049 *3*	5843.14	3+,2+	1880.31	
3642.52 *5*	0.072 *4*	5843.14	3+,2+	2200.58	3967.51 *6*	0.015 *1*	5843.14	3+,2+	1875.58	
3645.82 *4*	0.194 *10*	5843.14	3+,2+	2197.28	4000.98 *4*	0.177 *9*	5843.14	3+,2+	1842.11	
3650.20 *4*	0.54 *3*	5843.14	3+,2+	2192.90	4012.21 *4*	0.239 *13*	5843.14	3+,2+	1830.88	
3651.73 *4*	0.116 *6*	5843.14	3+,2+	2191.37	4016.63 *5*	0.057 *3*	5843.14	3+,2+	1826.46	
3654.47 *4*	0.505 *26*	5843.14	3+,2+	2188.63	4019.04 *5*	0.025 *1*	5843.14	3+,2+	1824.05	
3658.14 *6*	0.015 *1*	5843.14	3+,2+	2184.96	4029.38 *4*	0.118 *6*	5843.14	3+,2+	1813.71	
3659.83 *4*	0.088 *5*	5843.14	3+,2+	2183.27	4035.98 *5*	0.022 *1*	5843.14	3+,2+	1807.11	
3664.35 *4*	0.216 *11*	5843.14	3+,2+	2178.75	4044.86 *6*	0.016 *1*	5843.14	3+,2+	1798.23	
3675.48 *6*	0.024 *1*	5843.14	3+,2+	2167.62	4049.92 *4*	0.092 *5*	5843.14	3+,2+	1793.17	
3678.37 *4*	0.242 *13*	5843.14	3+,2+	2164.74	4058.06 *4*	0.151 *8*	5843.14	3+,2+	1785.03	
3690.27 *4*	0.119 *6*	5843.14	3+,2+	2152.83	4073.86 *4*	0.090 *5*	5843.14	3+,2+	1769.23	
3691.65 *6*	0.013 *1*	5843.14	3+,2+	2151.45	4078.71 *6*	0.015 *1*	5843.14	3+,2+	1764.38	
3694.90 *7*	0.012 *1*	5843.14	3+,2+	2148.20	4084.39 *6*	0.013 *1*	5843.14	3+,2+	1758.70	
3701.53 *5*	0.033 *2*	5843.14	3+,2+	2141.57	4090.15 *4*	0.167 *9*	5843.14	3+,2+	1752.94	
3709.64 *5*	0.067 *4*	5843.14	3+,2+	2133.46	4095.65 *5*	0.065 *3*	5843.14	3+,2+	1747.43	
3713.73 *4*	0.457 *24*	5843.14	3+,2+	2129.37	4109.50 *5*	0.062 *3*	5843.14	3+,2+	1733.59	
3716.27 *7*	0.010 *1*	5843.14	3+,2+	2126.83	4120.77 *4*	0.111 *6*	5843.14	3+,2+	1722.32	
3728.03 *5*	0.030 *2*	5843.14	3+,2+	2115.07	4134.04 *4*	0.370 *19*	5843.14	3+,2+	1709.05	
3736.16 *6*	0.015 *1*	5843.14	3+,2+	2106.94	4149.93 *5*	0.040 *2*	5843.14	3+,2+	1693.16	
3742.46 *4*	0.182 *10*	5843.14	3+,2+	2100.64	4159.51 *5*	0.036 *2*	5843.14	3+,2+	1683.58	
3746.47 *7*	0.011 *1*	5843.14	3+,2+	2096.63	4163.89 *4*	0.327 *17*	5843.14	3+,2+	1679.20	
3750.89 *5*	0.034 *2*	5843.14	3+,2+	2092.21	4177.00 *4*	0.391 *20*	5843.14	3+,2+	1666.09	
3762.26 *4*	0.168 *9*	5843.14	3+,2+	2080.84	4192.81 *4*	0.066 *4*	5843.14	3+,2+	1650.28	
3768.35 *6*	0.022 *1*	5843.14	3+,2+	2074.75	4203.21 *5*	0.061 *3*	5843.14	3+,2+	1639.88	
3771.88 *4*	0.230 *12*	5843.14	3+,2+	2071.21	4220.27 *4*	0.066 *4*	5843.14	3+,2+	1622.81	
3776.46 *4*	0.107 *6*	5843.14	3+,2+	2066.64	4226.78 *5*	0.031 *2*	5843.14	3+,2+	1616.30	
3782.32 *4*	0.100 *5*	5843.14	3+,2+	2060.78	4243.86 *5*	0.019 *1*	5843.14	3+,2+	1599.22	
3785.10 *5*	0.038 *2*	5843.14	3+,2+	2058.00	4252.14 *4*	0.342 *18*	5843.14	3+,2+	1590.95	
3790.37 *4*	1.41 *7*	5843.14	3+,2+	2052.73	4276.55 *4*	0.418 *22*	5843.14	3+,2+	1566.54	
3795.09 *5*	0.048 *3*	5843.14	3+,2+	2048.01	4279.01 *5*	0.050 *3*	5843.14	3+,2+	1564.08	
3800.04 *4*	0.193 *10*	5843.14	3+,2+	2043.06	4302.66 *7*	0.010 *1*	5843.14	3+,2+	1540.43	
3805.99 *7*	0.010 *1*	5843.14	3+,2+	2037.10	4304.62 *5*	0.040 *2*	5843.14	3+,2+	1538.46	
3811.64 *4*	0.253 *13*	5843.14	3+,2+	2031.40	4315.70 *4*	0.084 *4*	5843.14	3+,2+	1527.38	
3814.98 *6*	0.014 *1*	5843.14	3+,2+	2028.12	4325.50 *4*	0.115 *6*	5843.14	3+,2+	1517.59	
3820.42 *5*	0.068 *4*	5843.14	3+,2+	2022.67	4331.25 *5*	0.022 *1*	5843.14	3+,2+	1511.84	
3825.66 *4*	0.120 *6*	5843.14	3+,2+	2017.43	4343.70 *5*	0.038 *2*	5843.14	3+,2+	1499.38	
3830.28 *5*	0.047 *3*	5843.14	3+,2+	2012.81	4347.62 *4*	0.135 *7*	5843.14	3+,2+	1495.46	
3849.81 *5*	0.023 *1*	5843.14	3+,2+	1993.29	4372.53 *4*	0.275 *14*	5843.14	3+,2+	1470.55	
3858.22 *5*	0.066 *4*	5843.14	3+,2+	1984.88	4376.66 *5*	0.045 *2*	5843.14	3+,2+	1466.42	
3862.86 *4*	0.167 *9*	5843.14	3+,2+	1980.23	4382.96 *5*	0.022 *1*	5843.14	3+,2+	1460.12	
3868.44 *6*	0.012 *1*	5843.14	3+,2+	1974.66	4440.54 *4*	0.223 *12*	5843.14	3+,2+	1402.54	
3871.70 *4*	0.112 *6*	5843.14	3+,2+	1971.40	4449.26 *4*	0.185 *10*	5843.14	3+,2+	1393.82	
3873.91 *7*	0.011 *1*	5843.14	3+,2+	1969.18	4461.58 *5*	0.033 *2*	5843.14	3+,2+	1381.50	
3884.00 *5*	0.068 *4*	5843.14	3+,2+	1959.10	4496.44 *4*	0.93 *5*	5843.14	3+,2+	1346.64	
3889.37 *5*	0.053 *3*	5843.14	3+,2+	1953.72	4552.55 *5*	0.058 *3*	5843.14	3+,2+	1290.52	
3892.63 *4*	0.332 *17*	5843.14	3+,2+	1950.47	4579.64 *4*	0.087 *5*	5843.14	3+,2+	1263.44	
3902.50 *4*	0.108 *6*	5843.14	3+,2+	1940.60	4592.28 *4*	0.192 *10*	5843.14	3+,2+	1250.80	
3911.08 *4*	0.409 *21*	5843.14	3+,2+	1932.01	4660.68 *4*	0.075 *4*	5843.14	3+,2+	1182.39	
3915.17 *5*	0.025 *1*	5843.14	3+,2+	1927.93	4667.39 *5*	0.043 *2*	5843.14	3+,2+	1175.92	
3920.33 *5*	0.049 *3*	5843.14	3+,2+	1922.77	4684.26 *6*	0.013 *1*	5843.14	3+,2+	1158.81	
3923.07 *4*	0.233 *12*	5843.14	3+,2+	1920.02	4685.73 *5*	0.018 *1*	5843.14	3+,2+	1157.34	
3929.17 *5*	0.072 *4*	5843.14	3+,2+	1913.93	4692.12 *4*	2.92 *15*	5843.14	3+,2+	1150.93	2−,3−
3941.19 *4*	0.132 *7*	5843.14	3+,2+	1901.90	4722.86 *4*	0.95 *5*	5843.14	3+,2+	1120.19	3−,4−
3947.10 *4*	0.188 *10*	5843.14	3+,2+	1895.99	4728.46 *6*	0.010 *1*	5843.14	3+,2+	1114.61	

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^{141}Pr(n,γ) E=thermal 1985AlZN,1981Ke11,1968Ke08 (continued)

$\gamma(^{142}Pr)$ (continued)

E_γ[‡]	I_γ[†‡]	E_i(level)	J_i^π	E_f	J_f^π
4731.37 *4*	0.129 *7*	5843.14	$3^+,2^+$	1111.790	$3^-,4^-$
4770.82 *5*	0.040 *2*	5843.14	$3^+,2^+$	1072.34	$2^-,3^-$
4801.24 *4*	1.45 *8*	5843.14	$3^+,2^+$	1041.82	$2^-,3^-$
4864.76 *4*	0.125 *7*	5843.14	$3^+,2^+$	978.15	$2^-,3^-$
5020.46 *4*	0.171 *9*	5843.14	$3^+,2^+$	822.80	$2^-,3^-$
5052.76 *4*	0.334 *17*	5843.14	$3^+,2^+$	790.33	$2^-,3^-$
5096.11 *4*	2.00 *10*	5843.14	$3^+,2^+$	746.94	$2^-,3^-$
5137.89 *4*	0.86 *5*	5843.14	$3^+,2^+$	705.12	$3^-,4^-$
5140.73 *4*	2.79 *15*	5843.14	$3^+,2^+$	702.32	
5205.98 *4*	0.319 *17*	5843.14	$3^+,2^+$	636.96	4^-
5642.62 *5*	0.030 *2*	5843.14	$3^+,2^+$	200.525	$(2)^-$
5666.16 *4*	3.87 *20*	5843.14	$3^+,2^+$	176.8630	$(3)^-$
5698.40 *4*	0.100 *5*	5843.14	$3^+,2^+$	144.5862	4^-
5757.96 *5*	0.031 *2*	5843.14	$3^+,2^+$	84.998	1^-
5770.72 *4*	0.367 *19*	5843.14	$3^+,2^+$	72.2932	4^-
5825.27 *4*	0.435 *23*	5843.14	$3^+,2^+$	17.7399	3^-
5843.02 *4*	1.55 *8*	5843.14	$3^+,2^+$	0.0	2^-

[†] Iγ per 100 n captures.
[‡] From 1968Ke08 for Eγ<1500 and from 1981Ke11 for Eγ>2300; Iγ for low energy γ's are fromGe(Li) measurements, except where noted.
[#] From 1970Or05.
[@] From cryst (1968Ke08). Uncertainties are relative values only, and hold for closed-lying transitions. An additional correction factor of 1.3 may be necessary when comparing intensities for E(level)<100 with those for E(level)>200.
[&] From 1968Ke08; other: 176.8889 *20* (1984AlZK).
[a] Multiply placed with undivided intensity.
[x] γ ray not placed in level scheme.

^{141}Pr(n,γ) E=thermal 1985AlZN,1981Ke11,1968Ke08

Level Scheme

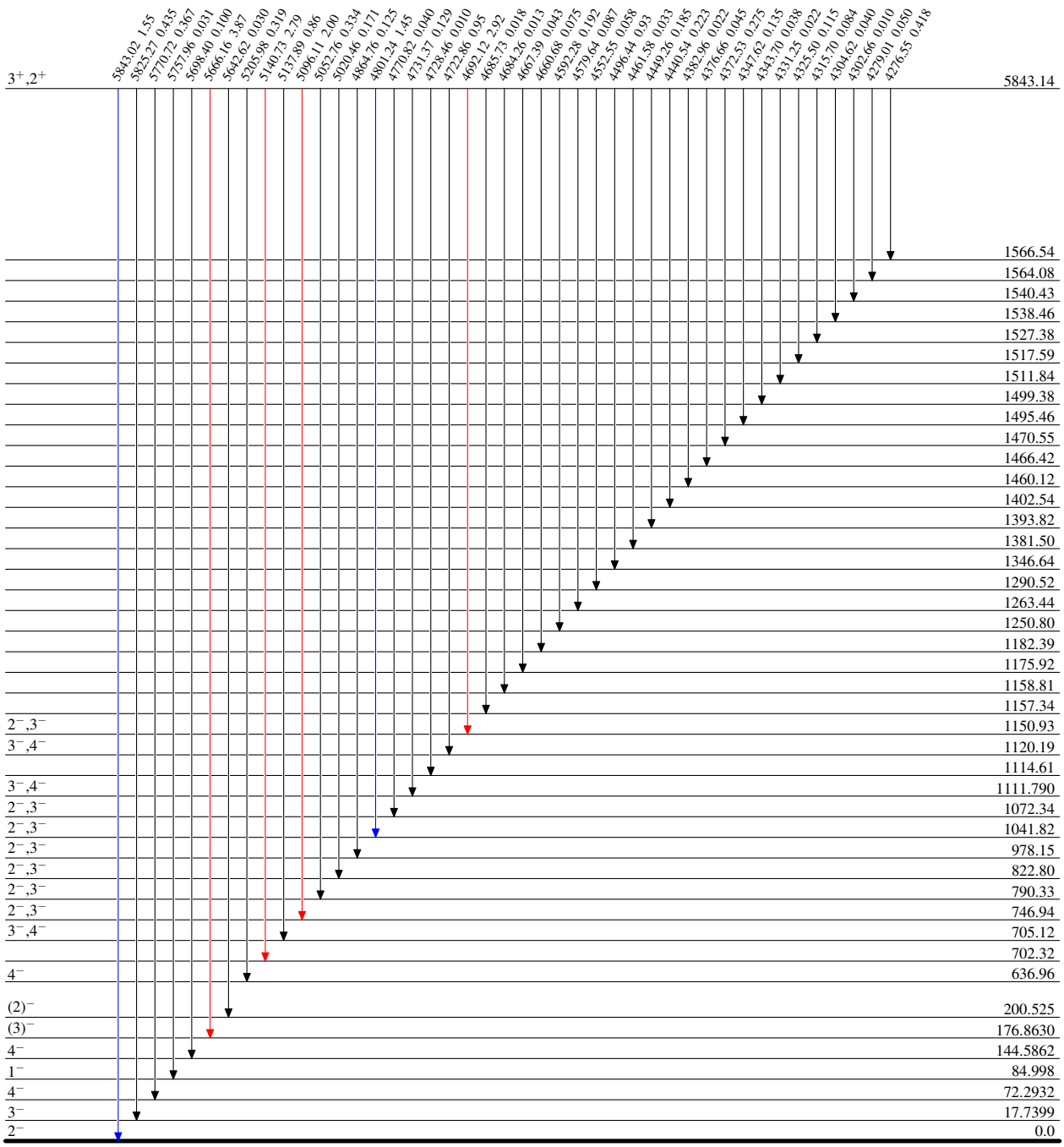
Intensities: Relative I_γ

Legend

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

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

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



$^{142}_{59}Pr_{83}$

^{141}Pr(n,γ) E=thermal 1985AlZN,1981Ke11,1968Ke08

Level Scheme (continued)

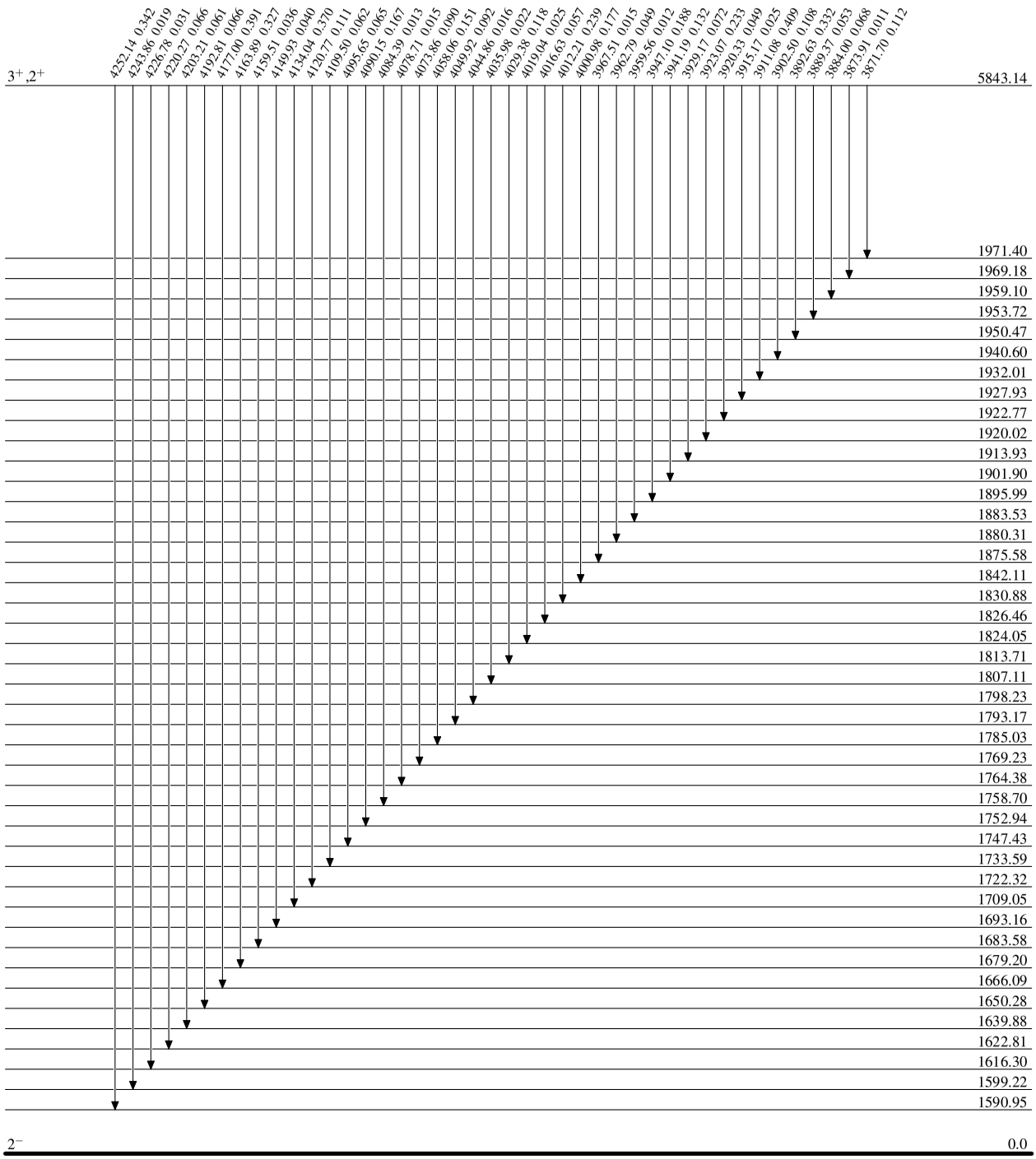
Intensities: Relative I_γ

Legend

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

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

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



$^{142}_{59}Pr_{83}$

^{141}Pr(n,γ) E=thermal 1985AlZN,1981Ke11,1968Ke08

Level Scheme (continued)

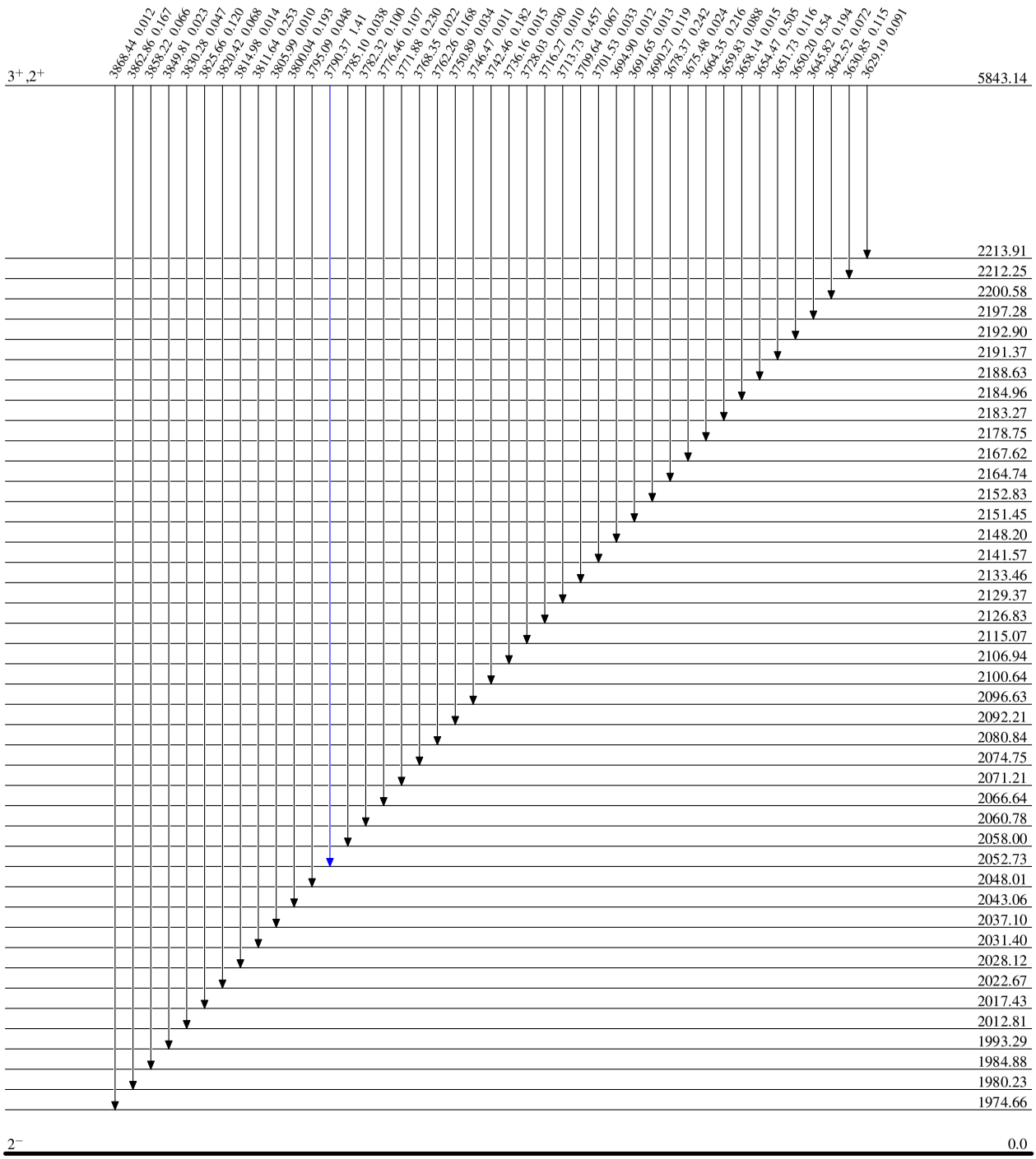
Intensities: Relative I_γ

Legend

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

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

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



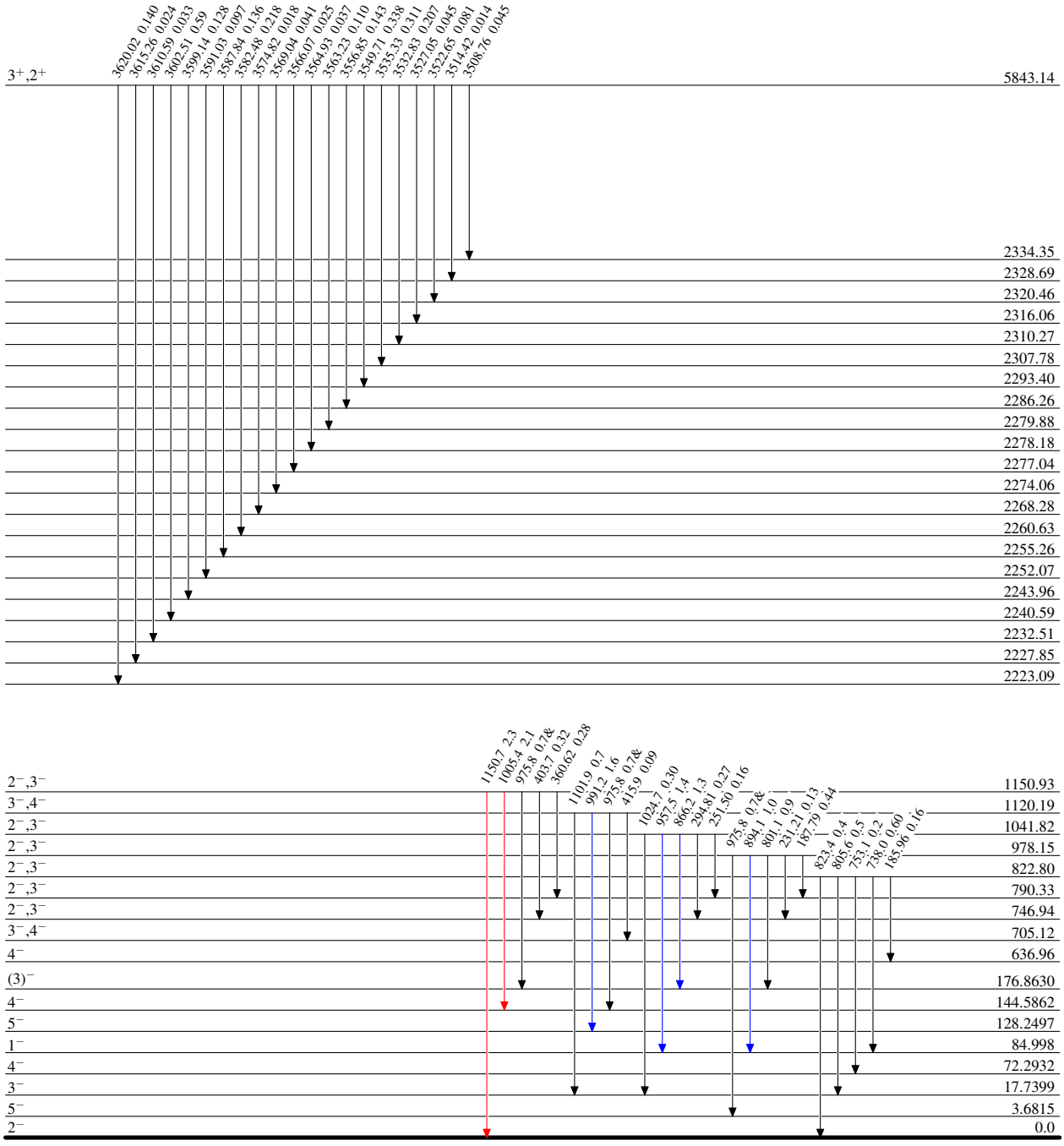
$^{142}_{59}Pr_{83}$

^{141}Pr(n,γ) E=thermal 1985AlZN,1981Ke11,1968Ke08

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



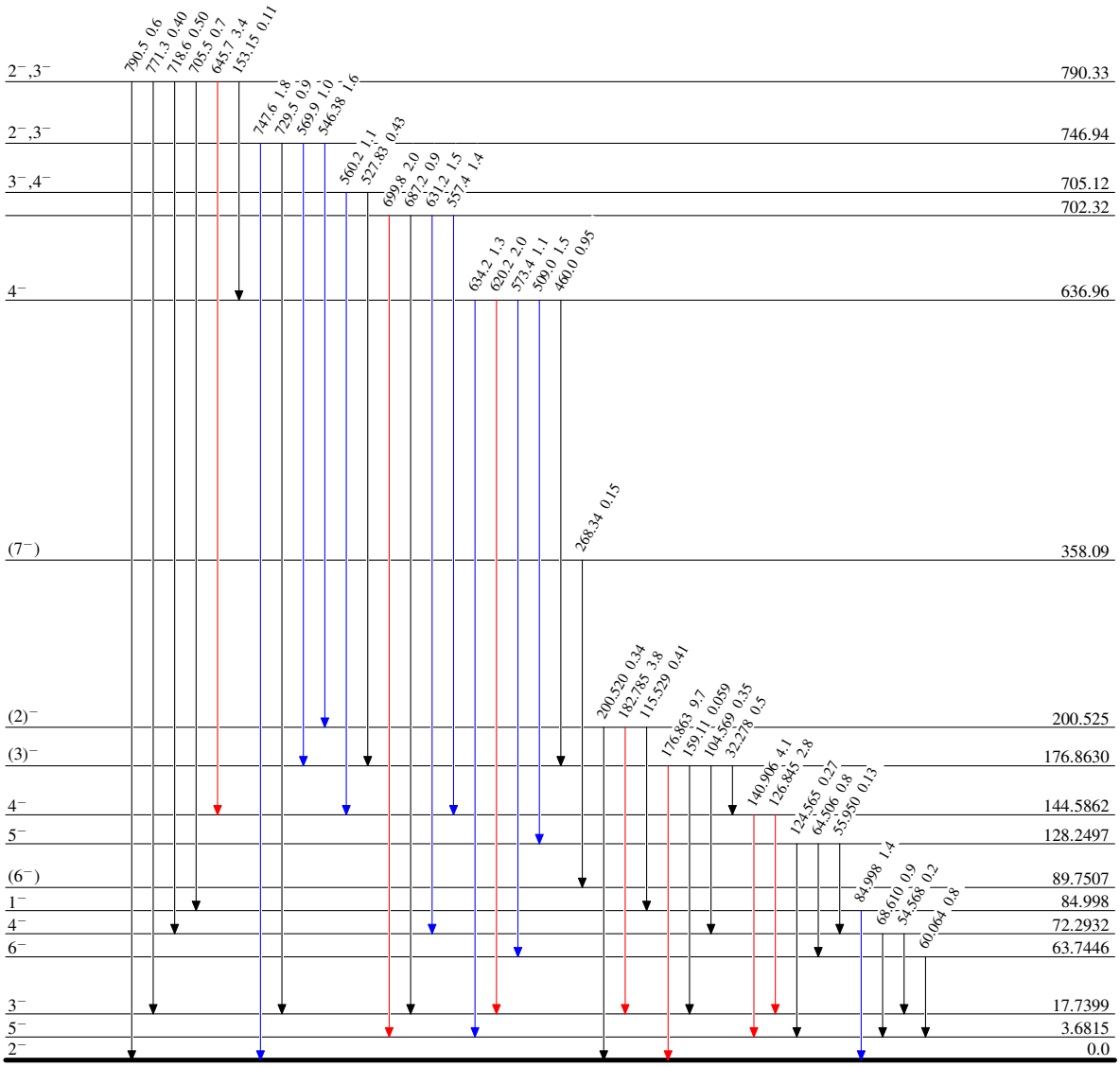
$^{142}_{59}Pr_{83}$

^{141}Pr(n,γ) E=thermal 1985AlZN,1981Ke11,1968Ke08

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



$^{142}_{59}Pr_{83}$