^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	Wang Jimin and Huang Xiaolong	NDS 144, 1 (2017)	1-Mar-2016

Target $J^\pi=6^+$.

1991Mi08: measured Eγ, Iγ, with Ge (FWHM=2.2 keV at Eγ=1.33 MeV) and pair spectrometer (FWHM=2.3-5.1 keV at Eγ=2-8 MeV). Obtained S(n)=11051.11 keV *17*, which is consistent with recommended value 11051.15 keV *8* (2017Wa10).

1978Ro03: measured Eγ, Iγ with Ge(Li)-NaI. Obtained S(n).

1973HaWJ: measured Eγ, Iγ, and $\gamma\gamma$ coin with Ge(Li), but primary γ not given.

Measured S(n)=11051.40 keV *10* (1978Ro03) is consistent with recommended value 11051.15 keV *8* (2017Wa10).

^{51}V Levels

All data from 1991Mi08, except as noted.

E(level)†	J$^\pi$‡	Comments
0.0	$7/2^-$	
320.07 *4*	$5/2^-$	
1609.22 *3*	$11/2^-$	
1813.24 *3*	$9/2^-$	
2699.61 *4*	$15/2^-$	
3377.68 *6*	$9/2^-$	J$^\pi$: J=$9/2^-$ (1973HaWJ) and $11/2^-$ (1978Ro03).
3385.58 *6*	$13/2^-$	J$^\pi$: J=$15/2^-$ (1978Ro03).
3395.02 *6*	$(13/2)^-$	
3517.05 *12*	$9/2^-$	
3614.05 *6*	$(9/2,11/2)^-$	
3803.58 *7*	$(9/2,11/2)^-$	
3873.69 *7*	$15/2^-$	
3902.33 *7*	$(9/2,11/2)^+$	
3919.46 *6*	$9/2^-$	
3943.32 *7*		
4002.55 *8*	$(7/2^-,9/2^-)$	
4124.04 *7*	$(7/2,9/2,11/2)^-$	
4224.80 *7*	$(9/2,11/2)^-$	
4446.68 *8*	$(9/2,11/2)^-$	
4493.90 *7*	$(11/2,13/2)^-$	
4560.57 *8*	$(9/2,11/2)^-$	
4582.77 *9*	$(9/2)^-$	
4894.28 *9*	$(11/2,13/2,15/2)^-$	
4916.09 *10*	$(9/2^-,11/2^-,13/2^-)$	
5019.95 *8*		
5030.31 *11*		
5113.28 *9*	$(11/2,13/2)^-$	
5188.43 *9*	$(11/2,13/2,15/2)^-$	
5208.50 *9*		
5255.99 *9*	$(11/2,13/2,15/2)^-$	
5308.13 *11*	$(9/2)^-$	
5325.36 *9*		
5333.32 *9*		
5403.72 *9*		
5628.67 *10*	$(11/2^-,13/2^-)$	
5808.01 *11*	$(11/2^-)$	
5817.75 *11*	$(11/2^-,13/2^-)$	
5849.75 *10*	$(9/2^-,11/2,13/2^-)$	
5913.56 *10*	$(11/2^-,13/2^-)$	

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^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ (continued)

^{51}V Levels (continued)

E(level)[†]	Jπ[‡]	Comments
5943.13 *11*	(9/2⁻,11/2,13/2⁻)	
5948.54 *11*	(9/2⁻,11/2,13/2⁻)	
5981.35[#] *11*	(9/2⁻,13/2⁻)	
6038.55 *11*	(9/2⁻,11/2⁻)	
6059.35 *12*	(9/2,11/2,13/2)⁻	
6100.79 *15*	(9/2⁻,11/2,13/2⁻)	
6114.05 *11*	(11/2⁻,13/2⁻)	
6259.89 *11*	(11/2,13/2)⁻	
6264.66 *15*	(9/2⁻,11/2,13/2⁻)	
6266.0[#] *4*	(11/2⁻)	
6297.22 *11*	(9/2,11/2,13/2)⁻	
6379.91 *10*	(9/2,11/2,13/2)⁻	
6437.78 *11*	(11/2⁻,13/2⁻)	
6464.05 *13*	(9/2⁻,11/2,13/2⁻)	
6485.45 *12*	(9/2,11/2,13/2)⁻	
6496.08 *13*	(11/2⁻,13/2⁻)	
6570.41 *11*	(11/2,13/2)⁻	
6579.46[#] *12*	(9/2⁻)	
6675.34[#] *13*	(11/2⁻,13/2⁻)	
6830.51[#] *14*	(11/2⁻,13/2⁻)	
6931.19[#] *13*	(11/2⁻,13/2⁻)	
6977.40[#] *13*	(9/2⁻,11/2,13/2⁻)	
(11051.15 *8*)	11/2⁺,13/2⁺[@]	E(level): E=S(n) (2017Wa10) for E(n)=0 capture.

[†] From least-squares fit to the Eγ data. The ΔEγ include a systematic uncertainty of 10 ppm below Ex=3 MeV and 15 ppm above.
[‡] From Adopted Levels.
[#] Probable state obtained by 1991Mi08.
[@] s-wave neutron capture.

γ(^{51}V)

All data from 1991Mi08, except as noted.

Eγ	Iγ[†@]	Ei(level)	J_i^π	Ef	J_f^π
313.42 *7*		5333.32		5019.95	
320.07 *6*	8.8[‡]	320.07	5/2⁻	0.0	7/2⁻
488.11 *4*	0.79 *16*	3873.69	15/2⁻	3385.58	13/2⁻
524.30 *4*	0.055 *11*	5849.75	(9/2⁻,11/2,13/2⁻)	5325.36	
531.64 *14*	0.043 *9*	6570.41	(11/2,13/2)⁻	6038.55	(9/2⁻,11/2⁻)
541.87[&] *13*	0.049[&] *10*	3919.46	9/2⁻	3377.68	9/2⁻
541.87[&] *13*	0.049[&] *10*	5849.75	(9/2⁻,11/2,13/2⁻)	5308.13	(9/2)⁻
544.37 *7*	0.109 *22*	4446.68	(9/2,11/2)⁻	3902.33	(9/2,11/2)⁺
546.7 *3*	0.026 *5*	6496.08	(11/2⁻,13/2⁻)	5948.54	(9/2⁻,11/2,13/2⁻)
557.90 *6*	0.114 *23*	4560.57	(9/2,11/2)⁻	4002.55	(7/2⁻,9/2⁻)
580.17 *7*	0.121 *24*	4582.77	(9/2)⁻	4002.55	(7/2⁻,9/2⁻)
582.22 *11*	0.071 *14*	6496.08	(11/2⁻,13/2⁻)	5913.56	(11/2⁻,13/2⁻)
[x]587.27 *4*	0.41 *8*				

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^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ (continued)

γ(^{51}V) (continued)

E_γ	I_γ†@	E_i(level)	J_i^π	E_f	J_f^π
591.55 *4*	0.25 *5*	4493.90	(11/2,13/2)$^-$	3902.33	(9/2,11/2)$^+$
x595.94 *5*	0.21 *4*				
597.89& *16*	0.058& *12*	5628.67	(11/2$^-$,13/2$^-$)	5030.31	
597.89& *16*	0.058& *12*	6579.46	(9/2$^-$)	5981.35	(9/2$^-$,13/2$^-$)
599.91 *17*	0.071 *14*	5808.01	(11/2$^-$)	5208.50	
608.65 *10*	0.073 *15*	5628.67	(11/2$^-$,13/2$^-$)	5019.95	
610.82 *10*	0.077 *15*	4224.80	(9/2,11/2)$^-$	3614.05	(9/2,11/2)$^-$
613.8 *3*	0.022 *4*	6464.05	(9/2$^-$,11/2,13/2$^-$)	5849.75	(9/2$^-$,11/2,13/2$^-$)
617.38 *23*	0.029 *6*	4560.57	(9/2,11/2)$^-$	3943.32	
620.16 *4*	0.47 *9*	4493.90	(11/2,13/2)$^-$	3873.69	15/2$^-$
640.31 *12*	0.053 *11*	5948.54	(9/2$^-$,11/2,13/2$^-$)	5308.13	(9/2)$^-$
685.94 *3*	0.62 *12*	3385.58	13/2$^-$	2699.61	15/2$^-$
692.31 *10*	0.087 *17*	5948.54	(9/2$^-$,11/2,13/2$^-$)	5255.99	(11/2,13/2,15/2)$^-$
694.34 *17*	0.118 *24*	5808.01	(11/2$^-$)	5113.28	(11/2,13/2)$^-$
695.98 *20*	0.066 *13*	5255.99	(11/2,13/2,15/2)$^-$	4560.57	(9/2,11/2)$^-$
704.38 *16*	0.043 *9*	5817.75	(11/2$^-$,13/2$^-$)	5113.28	(11/2,13/2)$^-$
707.76 *14*	0.052 *10*	4224.80	(9/2,11/2)$^-$	3517.05	9/2$^-$
746.36 *22*	0.033 *7*	4124.04	(7/2,9/2,11/2)$^-$	3377.68	9/2$^-$
x754.29 *5*	0.206 *41*				
762.06 *6*	0.15 *3*	5255.99	(11/2,13/2,15/2)$^-$	4493.90	(11/2,13/2)$^-$
779.07 *19*	0.043 *9*	4582.77	(9/2)$^-$	3803.58	(9/2,11/2)$^-$
809.37 *9*	0.092 *18*	5255.99	(11/2,13/2,15/2)$^-$	4446.68	(9/2,11/2)$^-$
829.79& *10*	0.092& *18*	5849.75	(9/2$^-$,11/2,13/2$^-$)	5019.95	
829.79& *10*	0.092& *18*	5943.13	(9/2$^-$,11/2,13/2$^-$)	5113.28	(11/2,13/2)$^-$
832.59 *3*	2.27 *45*	4446.68	(9/2,11/2)$^-$	3614.05	(9/2,11/2)$^-$
868.08 *15*	0.055 *11*	5981.35	(9/2$^-$,13/2$^-$)	5113.28	(11/2,13/2)$^-$
879.84 *7*	0.14 *3*	4493.90	(11/2,13/2)$^-$	3614.05	(9/2,11/2)$^-$
893.50& *9*	0.106& *21*	5913.56	(11/2$^-$,13/2$^-$)	5019.95	
893.50& *9*	0.106& *21*	6297.22	(9/2,11/2,13/2)$^-$	5403.72	
909.72 *24*	0.036 *7*	5403.72		4493.90	(11/2,13/2)$^-$
926.8 *3*	0.039 *8*	6259.89	(11/2,13/2)$^-$	5333.32	
928.70 *8*	0.16 *3*	5948.54	(9/2$^-$,11/2,13/2$^-$)	5019.95	
931.7 *3*	0.030 *6*	6264.66	(9/2$^-$,11/2,13/2$^-$)	5333.32	
934.57 *3*	0.80 *16*	6259.89	(11/2,13/2)$^-$	5325.36	
x946.82 *4*	0.29 *6*				
972.62 *8*	0.14 *3*	4916.09	(9/2$^-$,11/2$^-$,13/2$^-$)	3943.32	
997.07 *20*	0.045 *9*	4916.09	(9/2$^-$,11/2$^-$,13/2$^-$)	3919.46	9/2$^-$
1020.44 *7*	0.16 *3*	4894.28	(11/2,13/2,15/2)$^-$	3873.69	15/2$^-$
1038.9 *4*	0.024 *5*	6059.35	(9/2,11/2,13/2)$^-$	5019.95	
1043.60 *7*	0.18 *4*	4560.57	(9/2,11/2)$^-$	3517.05	9/2$^-$
1046.2& *3*	0.038& *8*	5628.67	(11/2$^-$,13/2$^-$)	4582.77	(9/2)$^-$
1046.2& *3*	0.038& *8*	6379.91	(9/2,11/2,13/2)$^-$	5333.32	
1051.54& *15*	0.068& *14*	4446.68	(9/2,11/2)$^-$	3395.02	(13/2)$^-$
1051.54& *15*	0.068& *14*	6259.89	(11/2,13/2)$^-$	5208.50	
1061.14 *4*	0.63 *13*	4446.68	(9/2,11/2)$^-$	3385.58	13/2$^-$
1084.77 *20*	0.051 *10*	5208.50		4124.04	(7/2,9/2,11/2)$^-$
1090.37 *3*	16.7 *33*	2699.61	15/2$^-$	1609.22	11/2$^-$
x1096.97 *9*	0.30 *6*				
x1098.61 *7*	0.61 *12*				
1100.50& *15*	0.13& *3*	5019.95		3919.46	9/2$^-$
1100.50& *15*	0.13& *3*	5325.36		4224.80	(9/2,11/2)$^-$
1108.52& *18*	0.058& *12*	5333.32		4224.80	(9/2,11/2)$^-$

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^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ (continued)

γ(^{51}V) (continued)

E_γ	I_γ[†][@]	E_i(level)	J_i^π	E_f	J_f^π
1108.52[&] *18*	0.058[&] *12*	6297.22	(9/2,11/2,13/2)$^-$	5188.43	(11/2,13/2,15/2)$^-$
1165.19 *12*	0.32 *6*	4560.57	(9/2,11/2)$^-$	3395.02	(13/2)$^-$
1174.04 *3*	7.7 *15*	3873.69	15/2$^-$	2699.61	15/2$^-$
1187.78 *5*	0.29 *6*	4582.77	(9/2)$^-$	3395.02	(13/2)$^-$
1224.71 *22*	0.055 *11*	5808.01	(11/2$^-$)	4582.77	(9/2)$^-$
1229.56 *18*	0.071 *14*	6485.45	(9/2,11/2,13/2)$^-$	5255.99	(11/2,13/2,15/2)$^-$
1245.08 *4*	0.80 *16*	5188.43	(11/2,13/2,15/2)$^-$	3943.32	
1249.90 *21*	0.048 *10*	6437.78	(11/2$^-$,13/2$^-$)	5188.43	(11/2,13/2,15/2)$^-$
1257.09 *15*	0.109 *22*	5817.75	(11/2$^-$,13/2$^-$)	4560.57	(9/2,11/2)$^-$
1265.31 *6*	0.35 *7*	5208.50		3943.32	
[x]1267.52 *9*	0.23 *5*				
1275.39 *13*	0.101 *20*	6464.05	(9/2$^-$,11/2,13/2$^-$)	5188.43	(11/2,13/2,15/2)$^-$
1280.20 *6*	0.23 *5*	4894.28	(11/2,13/2,15/2)$^-$	3614.05	(9/2,11/2)$^-$
1288.70[&] *20*	0.094[&] *19*	5208.50		3919.46	9/2$^-$
1288.70[&] *20*	0.094[&] *19*	5849.75	(9/2$^-$,11/2,13/2$^-$)	4560.57	(9/2,11/2)$^-$
1302.12 *5*	0.35 *7*	4916.09	(9/2$^-$,11/2$^-$,13/2$^-$)	3614.05	(9/2,11/2)$^-$
1305.18 *23*	0.107 *21*	5308.13	(9/2)$^-$	4002.55	(7/2$^-$,9/2$^-$)
1314.29 *11*	0.113 *23*	5808.01	(11/2$^-$)	4493.90	(11/2,13/2)$^-$
1330.68[&] *11*	0.14[&] *3*	5333.32		4002.55	(7/2$^-$,9/2$^-$)
1330.68[&] *11*	0.14[&] *3*	5913.56	(11/2$^-$,13/2$^-$)	4582.77	(9/2)$^-$
1353.19 *9*	0.16 *3*	5913.56	(11/2$^-$,13/2$^-$)	4560.57	(9/2,11/2)$^-$
1382.06[&] *12*	0.120[&] *24*	5255.99	(11/2,13/2,15/2)$^-$	3873.69	15/2$^-$
1382.06[&] *12*	0.120[&] *24*	5325.36		3943.32	
1388.78 *25*	0.057 *11*	5308.13	(9/2)$^-$	3919.46	9/2$^-$
1449.07 *20*	0.066 *13*	5943.13	(9/2$^-$,11/2,13/2$^-$)	4493.90	(11/2,13/2)$^-$
1493.16 *3*	5.1 *10*	1813.24	9/2$^-$	320.07	5/2$^-$
1498.73 *12*	0.15 *3*	6059.35	(9/2,11/2,13/2)$^-$	4560.57	(9/2,11/2)$^-$
1501.0 *3*	0.059 *12*	5403.72		3902.33	(9/2,11/2)$^+$
1520.66 *23*	0.055 *11*	4916.09	(9/2$^-$,11/2$^-$,13/2$^-$)	3395.02	(13/2)$^-$
1572.39 *7*	0.23 *5*	3385.58	13/2$^-$	1813.24	9/2$^-$
1581.80 *4*	1.7 *3*	3395.02	(13/2)$^-$	1813.24	9/2$^-$
1609.22 *3*	80[#] *16*	1609.22	11/2$^-$	0.0	7/2$^-$
1642.14 *11*	0.16 *3*	5255.99	(11/2,13/2,15/2)$^-$	3614.05	(9/2,11/2)$^-$
1644.64 *8*	0.23 *5*	5030.31		3385.58	13/2$^-$
[x]1660.84 *6*	0.30 *6*				
1683.92 *10*	0.14 *3*	5808.01	(11/2$^-$)	4124.04	(7/2,9/2,11/2)$^-$
1703.80[&] *10*	0.121[&] *24*	3517.05	9/2$^-$	1813.24	9/2$^-$
1703.80[&] *10*	0.121[&] *24*	6264.66	(9/2$^-$,11/2,13/2$^-$)	4560.57	(9/2,11/2)$^-$
1719.12 *7*	0.21 *4*	5333.32		3614.05	(9/2,11/2)$^-$
[x]1727.42 *5*	0.36 *7*				
1759.8 *3*	0.049 *10*	6675.34	(11/2$^-$,13/2$^-$)	4916.09	(9/2$^-$,11/2$^-$,13/2$^-$)
1768.83 *7*	0.31 *6*	6977.40	(9/2$^-$,11/2,13/2$^-$)	5208.50	
[x]1771.86 *7*	0.38 *8*				
1776.38 *4*	20 *4*	3385.58	13/2$^-$	1609.22	11/2$^-$
1785.72 *4*	1.9 *4*	3395.02	(13/2)$^-$	1609.22	11/2$^-$
1794.37 *4*	0.60 *12*	4493.90	(11/2,13/2)$^-$	2699.61	15/2$^-$
1800.80 *4*	3.1 *6*	3614.05	(9/2,11/2)$^-$	1813.24	9/2$^-$
1802.79 *4*	1.3 *3*	5188.43	(11/2,13/2,15/2)$^-$	3385.58	13/2$^-$
[x]1811.4 *3*	0.060 *12*				
1813.24 *3*	16.5 *33*	1813.24	9/2$^-$	0.0	7/2$^-$
1819.27[&] *10*	0.15[&] *3*	5943.13	(9/2$^-$,11/2,13/2$^-$)	4124.04	(7/2,9/2,11/2)$^-$
1819.27[&] *10*	0.15[&] *3*	6379.91	(9/2,11/2,13/2)$^-$	4560.57	(9/2,11/2)$^-$
1847.39 *9*	0.15 *3*	5849.75	(9/2$^-$,11/2,13/2$^-$)	4002.55	(7/2$^-$,9/2$^-$)

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^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ (continued)

γ(^{51}V) (continued)

E_γ	I_γ†@	E_i(level)	J_i^π	E_f	J_f^π
1864.02 *12*	0.103 *21*	6977.40	(9/2$^-$,11/2,13/2$^-$)	5113.28	(11/2,13/2)$^-$
1870.32 *4*	0.55 *11*	5255.99	(11/2,13/2,15/2)$^-$	3385.58	13/2$^-$
1874.76 *16*	0.080 *16*	5817.75	(11/2$^-$,13/2$^-$)	3943.32	
1881.24 *12*	0.30 *6*	6464.05	(9/2$^-$,11/2,13/2$^-$)	4582.77	(9/2)$^-$
1886.65 *15*	0.17 *3*	5403.72		3517.05	9/2$^-$
1914.39 *7*	0.19 *4*	6830.51	(11/2$^-$,13/2$^-$)	4916.09	(9/2$^-$,11/2$^-$,13/2$^-$)
1938.22 *4*	0.48 *10*	5333.32		3395.02	(13/2)$^-$
1955.45 *13*	0.19 *4*	5333.32		3377.68	9/2$^-$
1970.12& *9*	0.14& *3*	5913.56	(11/2$^-$,13/2$^-$)	3943.32	
1970.12& *9*	0.14& *3*	6464.05	(9/2$^-$,11/2,13/2$^-$)	4493.90	(11/2,13/2)$^-$
1990.32 *4*	0.54 *11*	3803.58	(9/2,11/2)$^-$	1813.24	9/2$^-$
2004.83 *4*	10.6 *21*	3614.05	(9/2,11/2)$^-$	1609.22	11/2$^-$
2009.0& *4*	0.072& *7*	5403.72		3395.02	(13/2)$^-$
2009.0& *4*	0.072& *7*	6570.41	(11/2,13/2)$^-$	4560.57	(9/2,11/2)$^-$
2011.1 *6*	0.047 *5*	5913.56	(11/2$^-$,13/2$^-$)	3902.33	(9/2,11/2)$^+$
2018.59& *22*	0.098& *10*	5403.72		3385.58	13/2$^-$
2018.59& *22*	0.098& *10*	6579.46	(9/2$^-$)	4560.57	(9/2,11/2)$^-$
x2083.78 *5*	0.36 *4*				
2089.07 *4*	1.78 *18*	3902.33	(9/2,11/2)$^+$	1813.24	9/2$^-$
2106.22 *6*	0.91 *9*	3919.46	9/2$^-$	1813.24	9/2$^-$
2130.08 *4*	1.41 *14*	3943.32		1813.24	9/2$^-$
2154.91 *21*	0.086 *9*	6379.91	(9/2,11/2,13/2)$^-$	4224.80	(9/2,11/2)$^-$
2194.33 *5*	0.56 *6*	3803.58	(9/2,11/2)$^-$	1609.22	11/2$^-$
2198.05 *17*	0.073 *7*	6100.79	(9/2$^-$,11/2,13/2$^-$)	3902.33	(9/2,11/2)$^+$
2212.7& *4*	0.036& *4*	6114.05	(11/2$^-$,13/2$^-$)	3902.33	(9/2,11/2)$^+$
2212.7& *4*	0.036& *4*	6437.78	(11/2$^-$,13/2$^-$)	4224.80	(9/2,11/2)$^-$
2228.4 *4*	0.045 *4*	6675.34	(11/2$^-$,13/2$^-$)	4446.68	(9/2,11/2)$^-$
2233.82 *15*	0.166 *17*	5628.67	(11/2$^-$,13/2$^-$)	3395.02	(13/2)$^-$
2235.86 *11*	0.26 *3*	5849.75	(9/2$^-$,11/2,13/2$^-$)	3614.05	(9/2,11/2)$^-$
2243.03 *6*	0.65 *6*	5628.67	(11/2$^-$,13/2$^-$)	3385.58	13/2$^-$
2245.7 *8*	0.025 *3*	6830.51	(11/2$^-$,13/2$^-$)	4582.77	(9/2)$^-$
2255.4& *4*	0.050& *5*	6059.35	(9/2,11/2,13/2)$^-$	3803.58	(9/2,11/2)$^-$
2255.4& *4*	0.050& *5*	6379.91	(9/2,11/2,13/2)$^-$	4124.04	(7/2,9/2,11/2)$^-$
2264.78 *18*	0.079 *8*	3873.69	15/2$^-$	1609.22	11/2$^-$
2293.06 *4*	3.7 *4*	3902.33	(9/2,11/2)$^+$	1609.22	11/2$^-$
2301.04 *19*	0.121 *12*	5817.75	(11/2$^-$,13/2$^-$)	3517.05	9/2$^-$
x2307.21 *7*	0.33 *3*				
2310.52 *5*	0.75 *7*	6114.05	(11/2$^-$,13/2$^-$)	3803.58	(9/2,11/2)$^-$
2334.04 *5*	2.35 *24*	3943.32		1609.22	11/2$^-$
2336.6 *5*	0.080 *8*	6830.51	(11/2$^-$,13/2$^-$)	4493.90	(11/2,13/2)$^-$
2345.3& *5*	0.053& *5*	6264.66	(9/2$^-$,11/2,13/2$^-$)	3919.46	9/2$^-$
2345.3& *5*	0.053& *5*	6570.41	(11/2,13/2)$^-$	4224.80	(9/2,11/2)$^-$
2353.8 *4*	0.040 *4*	6297.22	(9/2,11/2,13/2)$^-$	3943.32	
2357.80 *18*	0.078 *8*	6259.89	(11/2,13/2)$^-$	3902.33	(9/2,11/2)$^+$
2361.4& *5*	0.043& *4*	6264.66	(9/2$^-$,11/2,13/2$^-$)	3902.33	(9/2,11/2)$^+$
2361.4& *5*	0.043& *4*	6485.45	(9/2,11/2,13/2)$^-$	4124.04	(7/2,9/2,11/2)$^-$
2363.5 *4*	0.061 *6*	6266.0	(11/2$^-$)	3902.33	(9/2,11/2)$^+$
2377.4& *4*	0.037& *4*	6297.22	(9/2,11/2,13/2)$^-$	3919.46	9/2$^-$
2377.4& *4*	0.037& *4*	6379.91	(9/2,11/2,13/2)$^-$	4002.55	(7/2$^-$,9/2$^-$)
x2406.40 *14*	0.225 *22*				
2411.38 *6*	1.39 *14*	4224.80	(9/2,11/2)$^-$	1813.24	9/2$^-$
2413.54 *7*	0.67 *7*	5113.28	(11/2,13/2)$^-$	2699.61	15/2$^-$

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^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ (continued)

γ(^{51}V) (continued)

E_γ	I_γ †@	E_i(level)	J_i^π	E_f	J_f^π
2417.7 *4*	0.034 *3*	6977.40	(9/2$^-$,11/2,13/2$^-$)	4560.57	(9/2,11/2)$^-$
2422.72 *14*	0.103 *10*	5808.01	(11/2$^-$)	3385.58	13/2$^-$
2426.29 *10*	0.220 *22*	5943.13	(9/2$^-$,11/2,13/2$^-$)	3517.05	9/2$^-$
2431.52 *14*	0.146 *15*	5948.54	(9/2$^-$,11/2,13/2$^-$)	3517.05	9/2$^-$
2436.57 *15*	0.089 *9*	6379.91	(9/2,11/2,13/2)$^-$	3943.32	
2445.16 *10*	0.32 *3*	6059.35	(9/2,11/2,13/2)$^-$	3614.05	(9/2,11/2)$^-$
2461.3& *3*	0.051& *5*	6264.66	(9/2$^-$,11/2,13/2$^-$)	3803.58	(9/2,11/2)$^-$
2461.3& *3*	0.051& *5*	6464.05	(9/2$^-$,11/2,13/2$^-$)	4002.55	(7/2$^-$,9/2$^-$)
2463.94 *16*	0.116 *12*	5849.75	(9/2$^-$,11/2,13/2$^-$)	3385.58	13/2$^-$
2486.58 *14*	0.092 *9*	6100.79	(9/2$^-$,11/2,13/2$^-$)	3614.05	(9/2,11/2)$^-$
2488.78 *6*	0.65 *7*	5188.43	(11/2,13/2,15/2)$^-$	2699.61	15/2$^-$
2494.37 *7*	0.231 *23*	6437.78	(11/2$^-$,13/2$^-$)	3943.32	
2514.79 *5*	4.18 *42*	4124.04	(7/2,9/2,11/2)$^-$	1609.22	11/2$^-$
2528.02 *7*	0.28 *3*	5913.56	(11/2$^-$,13/2$^-$)	3385.58	13/2$^-$
2556.33 *5*	1.05 *11*	5255.99	(11/2,13/2,15/2)$^-$	2699.61	15/2$^-$
2561.98 *11*	0.122 *12*	6464.05	(9/2$^-$,11/2,13/2$^-$)	3902.33	(9/2,11/2)$^+$
2571.1 *3*	0.045 *4*	5948.54	(9/2$^-$,11/2,13/2$^-$)	3377.68	9/2$^-$
2584.7 *3*	0.052 *5*	6100.79	(9/2$^-$,11/2,13/2$^-$)	3517.05	9/2$^-$
x2595.17 *8*	0.218 *22*				
2604.1 *6*	0.023 *2*	5981.35	(9/2$^-$,13/2$^-$)	3377.68	9/2$^-$
2615.53 *5*	1.31 *13*	4224.80	(9/2,11/2)$^-$	1609.22	11/2$^-$
2632.71 *24*	0.048 *5*	4446.68	(9/2,11/2)$^-$	1813.24	9/2$^-$
2636.6 *3*	0.038 *4*	6579.46	(9/2$^-$)	3943.32	
2643.69 *15*	0.178 *18*	6038.55	(9/2$^-$,11/2$^-$)	3395.02	(13/2)$^-$
2653.14 *17*	0.075 *7*	6038.55	(9/2$^-$,11/2$^-$)	3385.58	13/2$^-$
2661.02 *14*	0.094 *9*	6038.55	(9/2$^-$,11/2$^-$)	3377.68	9/2$^-$
2664.1 *4*	0.035 *4*	6059.35	(9/2,11/2,13/2)$^-$	3395.02	(13/2)$^-$
2674.18 *15*	0.116 *12*	6059.35	(9/2,11/2,13/2)$^-$	3385.58	13/2$^-$
2676.86 *17*	0.096 *10*	6579.46	(9/2$^-$)	3902.33	(9/2,11/2)$^+$
2692.8 *5*	0.082 *8*	6496.08	(11/2$^-$,13/2$^-$)	3803.58	(9/2,11/2)$^-$
2696.5 *5*	0.037 *4*	6570.41	(11/2,13/2)$^-$	3873.69	15/2$^-$
2706.1& *6*	0.017& *2*	6100.79	(9/2$^-$,11/2,13/2$^-$)	3395.02	(13/2)$^-$
2706.1& *6*	0.017& *2*	6579.46	(9/2$^-$)	3873.69	15/2$^-$
2715.07 *18*	0.057 *6*	6100.79	(9/2$^-$,11/2,13/2$^-$)	3385.58	13/2$^-$
2719.5 *5*	0.019 *2*	6114.05	(11/2$^-$,13/2$^-$)	3395.02	(13/2)$^-$
2723.9 *8*	0.021 *2*	6100.79	(9/2$^-$,11/2,13/2$^-$)	3377.68	9/2$^-$
2732.9 *4*	0.054 *5*	6675.34	(11/2$^-$,13/2$^-$)	3943.32	
2747.37 *10*	0.126 *13*	6264.66	(9/2$^-$,11/2,13/2$^-$)	3517.05	9/2$^-$
2755.4 *6*	0.038 *4*	6675.34	(11/2$^-$,13/2$^-$)	3919.46	9/2$^-$
2769.5 *3*	0.038 *4*	4582.77	(9/2)$^-$	1813.24	9/2$^-$
2775.91 *16*	0.067 *7*	6579.46	(9/2$^-$)	3803.58	(9/2,11/2)$^-$
x2793.81 *7*	0.31 *3*				
2801.45 *19*	0.075 *7*	6675.34	(11/2$^-$,13/2$^-$)	3873.69	15/2$^-$
2824.5 *6*	0.028 *3*	6437.78	(11/2$^-$,13/2$^-$)	3614.05	(9/2,11/2)$^-$
2837.38 *7*	0.96 *10*	4446.68	(9/2,11/2)$^-$	1609.22	11/2$^-$
2871.05 *14*	0.082 *8*	6485.45	(9/2,11/2,13/2)$^-$	3614.05	(9/2,11/2)$^-$
2880.59 *18*	0.066 *7*	6266.0	(11/2$^-$)	3385.58	13/2$^-$
2884.52 *6*	0.65 *6*	4493.90	(11/2,13/2)$^-$	1609.22	11/2$^-$
x2890.54 *8*	0.28 *3*				
2928.78 *11*	0.39 *4*	5628.67	(11/2$^-$,13/2$^-$)	2699.61	15/2$^-$
x2930.46 *11*	0.39 *4*				
2947.25 *18*	0.068 *7*	6464.05	(9/2$^-$,11/2,13/2$^-$)	3517.05	9/2$^-$
2951.31 *6*	0.78 *8*	4560.57	(9/2,11/2)$^-$	1609.22	11/2$^-$
2956.98 *12*	0.26 *3*	6830.51	(11/2$^-$,13/2$^-$)	3873.69	15/2$^-$
2984.89 *15*	0.097 *10*	6379.91	(9/2,11/2,13/2)$^-$	3395.02	(13/2)$^-$

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^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ (continued)

γ(^{51}V) (continued)

E_γ	I_γ[†][@]	E_i(level)	J_i^π	E_f	J_f^π
2994.13 *11*	0.097 *10*	6379.91	(9/2,11/2,13/2)$^-$	3385.58	13/2$^-$
3028.4 *3*	0.083 *4*	6931.19	(11/2$^-$,13/2$^-$)	3902.33	(9/2,11/2)$^+$
3052.03 *7*	0.460 *23*	6437.78	(11/2$^-$,13/2$^-$)	3385.58	13/2$^-$
3057.61 *7*	0.478 *24*	3377.68	9/2$^-$	320.07	5/2$^-$
3061.34 *20*	0.070 *3*	6675.34	(11/2$^-$,13/2$^-$)	3614.05	(9/2,11/2)$^-$
3074.78 *19*	0.103 *5*	6977.40	(9/2$^-$,11/2,13/2$^-$)	3902.33	(9/2,11/2)$^+$
3108.1[&] *4*	0.024[&] *1*	5808.01	(11/2$^-$)	2699.61	15/2$^-$
3108.1[&] *4*	0.024[&] *1*	6485.45	(9/2,11/2,13/2)$^-$	3377.68	9/2$^-$
3117.81 *9*	0.199 *10*	5817.75	(11/2$^-$,13/2$^-$)	2699.61	15/2$^-$
3127.42 *10*	0.145 *7*	6931.19	(11/2$^-$,13/2$^-$)	3803.58	(9/2,11/2)$^-$
[x]3133.15 *13*	0.235 *12*				
[x]3174.77 *9*	0.238 *12*				
3184.91 *9*	0.165 *8*	6570.41	(11/2,13/2)$^-$	3385.58	13/2$^-$
3194.09 *22*	0.076 *4*	6579.46	(9/2$^-$)	3385.58	13/2$^-$
3196.86 *8*	0.378 *19*	3517.05	9/2$^-$	320.07	5/2$^-$
3200.3 *8*	0.024 *1*	6579.46	(9/2$^-$)	3377.68	9/2$^-$
3206.53 *7*	0.476 *24*	5019.95		1813.24	9/2$^-$
3213.34 *20*	0.119 *6*	5913.56	(11/2$^-$,13/2$^-$)	2699.61	15/2$^-$
3216.6 *3*	0.082 *4*	5030.31		1813.24	9/2$^-$
[x]3278.00 *8*	0.211 *11*				
3284.90 *7*	0.55 *3*	4894.28	(11/2,13/2,15/2)$^-$	1609.22	11/2$^-$
3289.38 *25*	0.040 *2*	6675.34	(11/2$^-$,13/2$^-$)	3385.58	13/2$^-$
3299.97 *10*	0.224 *11*	5113.28	(11/2,13/2)$^-$	1813.24	9/2$^-$
3306.2 *4*	0.040 *2*	4916.09	(9/2$^-$,11/2$^-$,13/2$^-$)	1609.22	11/2$^-$
3318.2 *4*	0.026 *1*	6931.19	(11/2$^-$,13/2$^-$)	3614.05	(9/2,11/2)$^-$
3377.57 *6*	3.68 *18*	3377.68	9/2$^-$	0.0	7/2$^-$
3395.00 *7*	0.71 *4*	5208.50		1813.24	9/2$^-$
[x]3402.31 *15*	0.200 *10*				
3414.57[&] *25*	0.086[&] *4*	6114.05	(11/2$^-$,13/2$^-$)	2699.61	15/2$^-$
3414.57[&] *25*	0.086[&] *4*	6931.19	(11/2$^-$,13/2$^-$)	3517.05	9/2$^-$
3420.67 *13*	0.129 *6*	5030.31		1609.22	11/2$^-$
3436.2 *5*	0.034 *2*	6830.51	(11/2$^-$,13/2$^-$)	3395.02	(13/2)$^-$
3444.5 *5*	0.028 *1*	6830.51	(11/2$^-$,13/2$^-$)	3385.58	13/2$^-$
[x]3448.03 *13*	0.242 *12*				
3453.30 *22*	0.089 *4*	6830.51	(11/2$^-$,13/2$^-$)	3377.68	9/2$^-$
3460.43 *11*	0.144 *7*	6977.40	(9/2$^-$,11/2,13/2$^-$)	3517.05	9/2$^-$
3494.74 *11*	0.156 *8*	5308.13	(9/2)$^-$	1813.24	9/2$^-$
3503.61 *14*	0.401 *20*	5113.28	(11/2,13/2)$^-$	1609.22	11/2$^-$
3516.81 *7*	1.19 *6*	3517.05	9/2$^-$	0.0	7/2$^-$
3519.81 *9*	0.63 *3*	5333.32		1813.24	9/2$^-$
[x]3540.87 *11*	0.292 *15*				
3544.6 *4*	0.028 *1*	6931.19	(11/2$^-$,13/2$^-$)	3385.58	13/2$^-$
3559.93 *16*	0.193 *10*	6259.89	(11/2,13/2)$^-$	2699.61	15/2$^-$
[x]3562.44 *9*	0.433 *22*				
3567.06 *20*	0.074 *4*	6266.0	(11/2$^-$)	2699.61	15/2$^-$
3590.46 *11*	0.265 *13*	5403.72		1813.24	9/2$^-$
3599.19[&] *7*	2.08[&] *10*	3919.46	9/2$^-$	320.07	5/2$^-$
3599.19[&] *7*	2.08[&] *10*	5208.50		1609.22	11/2$^-$
[x]3609.93 *7*	0.434 *22*				
3613.76 *8*	0.352 *18*	3614.05	(9/2,11/2)$^-$	0.0	7/2$^-$
3622.89 *15*	0.068 *3*	3943.32		320.07	5/2$^-$
[x]3634.53 *8*	0.250 *13*				
3681.68 *22*	0.214 *11*	4002.55	(7/2$^-$,9/2$^-$)	320.07	5/2$^-$
3699.06 *13*	0.168 *8*	5308.13	(9/2)$^-$	1609.22	11/2$^-$

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^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ (continued)

γ(^{51}V) (continued)

E_γ	I_γ[†][@]	E_i(level)	J_i^π	E_f	J_f^π
3715.90 *10*	0.448 *22*	5325.36		1609.22	$11/2^-$
3723.59 *36*	0.089 *4*	5333.32		1609.22	$11/2^-$
[x]3732.98 *9*	0.443 *22*				
[x]3759.29 *7*	0.54 *3*				
[x]3787.97 *8*	0.218 *11*				
3796.34 *11*	0.147 *7*	6496.08	$(11/2^-,13/2^-)$	2699.61	$15/2^-$
3803.58 *10*	0.254 *13*	3803.58	$(9/2,11/2)^-$	0.0	$7/2^-$
3815.49 *11*	0.322 *16*	5628.67	$(11/2^-,13/2^-)$	1813.24	$9/2^-$
[x]3901.92 *9*	0.204 *10*				
[x]3915.70 *10*	0.376 *19*				
3919.27 *7*	1.14 *6*	3919.46	$9/2^-$	0.0	$7/2^-$
4002.34 *7*	1.13 *6*	4002.55	$(7/2^-,9/2^-)$	0.0	$7/2^-$
4018.95 *12*	0.094 *5*	5628.67	$(11/2^-,13/2^-)$	1609.22	$11/2^-$
4036.47 *8*	0.277 *14*	5849.75	$(9/2^-,11/2,13/2^-)$	1813.24	$9/2^-$
4073.66 *13*	0.247 *12*	(11051.15)	$11/2^+,13/2^+$	6977.40	$(9/2^-,11/2,13/2^-)$
4100.56 *43*	0.018 *1*	5913.56	$(11/2^-,13/2^-)$	1813.24	$9/2^-$
4119.53 *18*	0.170 *9*	(11051.15)	$11/2^+,13/2^+$	6931.19	$(11/2^-,13/2^-)$
4123.68 *9*	0.497 *25*	4124.04	$(7/2,9/2,11/2)^-$	0.0	$7/2^-$
4129.85 *30*	0.071 *4*	5943.13	$(9/2^-,11/2,13/2^-)$	1813.24	$9/2^-$
4168.07 *9*	0.171 *9*	5981.35	$(9/2^-,13/2^-)$	1813.24	$9/2^-$
[x]4182.77 *9*	0.238 *12*				
[x]4198.14 *8*	0.400 *20*				
4220.66 *10*	0.312 *16*	(11051.15)	$11/2^+,13/2^+$	6830.51	$(11/2^-,13/2^-)$
4224.77[&] *22*	0.049[&] *2*	4224.80	$(9/2,11/2)^-$	0.0	$7/2^-$
4224.77[&] *22*	0.049[&] *2*	6038.55	$(9/2^-,11/2^-)$	1813.24	$9/2^-$
4231.34 *9*	0.264 *13*	6931.19	$(11/2^-,13/2^-)$	2699.61	$15/2^-$
4262.33 *17*	0.092 *5*	4582.77	$(9/2)^-$	320.07	$5/2^-$
4300.33 *17*	0.215 *11*	6114.05	$(11/2^-,13/2^-)$	1813.24	$9/2^-$
4338.79 *17*	0.308 *15*	5948.54	$(9/2^-,11/2,13/2^-)$	1609.22	$11/2^-$
4375.63 *10*	0.162 *8*	(11051.15)	$11/2^+,13/2^+$	6675.34	$(11/2^-,13/2^-)$
[x]4391.58 *11*	0.263 *13*				
4428.96 *9*	0.215 *11*	6038.55	$(9/2^-,11/2^-)$	1609.22	$11/2^-$
4446.6[&] *5*	0.018[&] *1*	4446.68	$(9/2,11/2)^-$	0.0	$7/2^-$
4446.6[&] *5*	0.018[&] *1*	6259.89	$(11/2,13/2)^-$	1813.24	$9/2^-$
4471.39 *10*	0.207 *10*	(11051.15)	$11/2^+,13/2^+$	6579.46	$(9/2^-)$
4480.51 *11*	0.276 *14*	(11051.15)	$11/2^+,13/2^+$	6570.41	$(11/2,13/2)^-$
4483.68 *10*	0.402 *20*	6297.22	$(9/2,11/2,13/2)^-$	1813.24	$9/2^-$
[x]4504.20 *8*	0.60 *3*				
4554.65 *10*	0.301 *15*	(11051.15)	$11/2^+,13/2^+$	6496.08	$(11/2^-,13/2^-)$
4560.36 *14*	0.381 *19*	4560.57	$(9/2,11/2)^-$	0.0	$7/2^-$
4565.33 *10*	0.408 *20*	(11051.15)	$11/2^+,13/2^+$	6485.45	$(9/2,11/2,13/2)^-$
4587.02 *11*	0.175 *9*	(11051.15)	$11/2^+,13/2^+$	6464.05	$(9/2^-,11/2,13/2^-)$
4612.98 *9*	0.53 *3*	(11051.15)	$11/2^+,13/2^+$	6437.78	$(11/2^-,13/2^-)$
4655.41 *17*	0.318 *16*	6264.66	$(9/2^-,11/2,13/2^-)$	1609.22	$11/2^-$
4657.03 *13*	0.63 *3*	6266.0	$(11/2^-)$	1609.22	$11/2^-$
4670.92 *9*	0.376 *19*	(11051.15)	$11/2^+,13/2^+$	6379.91	$(9/2,11/2,13/2)^-$
4683.0 *7*	0.021 *1*	6496.08	$(11/2^-,13/2^-)$	1813.24	$9/2^-$
4753.56 *9*	0.52 *3*	(11051.15)	$11/2^+,13/2^+$	6297.22	$(9/2,11/2,13/2)^-$
4756.6 *4*	0.048 *2*	6570.41	$(11/2,13/2)^-$	1813.24	$9/2^-$
4783.92 *21*	0.214 *11*	(11051.15)	$11/2^+,13/2^+$	6266.0	$(11/2^-)$
4785.87 *17*	0.79 *4*	(11051.15)	$11/2^+,13/2^+$	6264.66	$(9/2^-,11/2,13/2^-)$
4791.15 *9*	0.383 *19*	(11051.15)	$11/2^+,13/2^+$	6259.89	$(11/2,13/2)^-$
4828.23 *9*	0.285 *14*	6437.78	$(11/2^-,13/2^-)$	1609.22	$11/2^-$
[x]4843.42 *9*	0.246 *12*				
4875.96 *10*	0.216 *11*	6485.45	$(9/2,11/2,13/2)^-$	1609.22	$11/2^-$

Continued on next page (footnotes at end of table)

^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ (continued)

γ(^{51}V) (continued)

E_γ	I_γ †@	E_i(level)	J_i^π	E_f	J_f^π
4886.4 *3*	0.062 *3*	6496.08	(11/2$^-$,13/2$^-$)	1609.22	11/2$^-$
4936.90 *9*	0.93 *5*	(11051.15)	11/2$^+$,13/2$^+$	6114.05	(11/2$^-$,13/2$^-$)
4949.94 *14*	0.247 *12*	(11051.15)	11/2$^+$,13/2$^+$	6100.79	(9/2$^-$,11/2,13/2$^-$)
4960.91 *10*	0.196 *10*	6570.41	(11/2,13/2)$^-$	1609.22	11/2$^-$
4988.1 *3*	0.081 *4*	5308.13	(9/2)$^-$	320.07	5/2$^-$
4991.57 *13*	0.63 *3*	(11051.15)	11/2$^+$,13/2$^+$	6059.35	(9/2,11/2,13/2)$^-$
5012.29 *9*	0.413 *21*	(11051.15)	11/2$^+$,13/2$^+$	6038.55	(9/2$^-$,11/2$^-$)
5017.4 *4*	0.027 *1*	6830.51	(11/2$^-$,13/2$^-$)	1813.24	9/2$^-$
5065.83 *16*	0.104 *5*	6675.34	(11/2$^-$,13/2$^-$)	1609.22	11/2$^-$
5069.57 *11*	0.187 *9*	(11051.15)	11/2$^+$,13/2$^+$	5981.35	(9/2$^-$,13/2$^-$)
5102.28 *9*	0.479 *24*	(11051.15)	11/2$^+$,13/2$^+$	5948.54	(9/2$^-$,11/2,13/2$^-$)
5107.83 *9*	0.336 *17*	(11051.15)	11/2$^+$,13/2$^+$	5943.13	(9/2$^-$,11/2,13/2$^-$)
5137.34 *9*	0.69 *4*	(11051.15)	11/2$^+$,13/2$^+$	5913.56	(11/2$^-$,13/2$^-$)
5163.6 *4*	0.032 *2*	6977.40	(9/2$^-$,11/2,13/2$^-$)	1813.24	9/2$^-$
5201.11 *9*	0.98 *5*	(11051.15)	11/2$^+$,13/2$^+$	5849.75	(9/2$^-$,11/2,13/2$^-$)
5208.08 *17*	0.358 *18*	5208.50		0.0	7/2$^-$
5233.04 *9*	0.56 *3*	(11051.15)	11/2$^+$,13/2$^+$	5817.75	(11/2$^-$,13/2$^-$)
5242.85 *9*	0.58 *3*	(11051.15)	11/2$^+$,13/2$^+$	5808.01	(11/2$^-$)
5321.80 *14*	0.141 *7*	6931.19	(11/2$^-$,13/2$^-$)	1609.22	11/2$^-$
5325.19 *19*	0.090 *5*	5325.36		0.0	7/2$^-$
5422.08 *9*	1.69 *8*	(11051.15)	11/2$^+$,13/2$^+$	5628.67	(11/2$^-$,13/2$^-$)
[x]5572.42 *10*	0.352 *18*				
[x]5635.92 *10*	0.291 *15*				
5647.08 *9*	0.76 *4*	(11051.15)	11/2$^+$,13/2$^+$	5403.72	
[x]5708.39 *13*	0.207 *10*				
5717.33 *9*	1.73 *9*	(11051.15)	11/2$^+$,13/2$^+$	5333.32	
5725.43 *10*	0.445 *22*	(11051.15)	11/2$^+$,13/2$^+$	5325.36	
5742.71 *13*	0.319 *16*	(11051.15)	11/2$^+$,13/2$^+$	5308.13	(9/2)$^-$
5794.78 *9*	1.54 *8*	(11051.15)	11/2$^+$,13/2$^+$	5255.99	(11/2,13/2,15/2)$^-$
5807.5 *9*	0.010 *1*	5808.01	(11/2$^-$)	0.0	7/2$^-$
5842.20 *10*	0.93 *5*	(11051.15)	11/2$^+$,13/2$^+$	5208.50	
5862.28 *10*	2.27 *11*	(11051.15)	11/2$^+$,13/2$^+$	5188.43	(11/2,13/2,15/2)$^-$
5937.45 *10*	1.00 *5*	(11051.15)	11/2$^+$,13/2$^+$	5113.28	(11/2,13/2)$^-$
5975.0 *7*	0.013 *1*	6297.22	(9/2,11/2,13/2)$^-$	320.07	5/2$^-$
5980.74 *13*	0.130 *7*	5981.35	(9/2$^-$,13/2$^-$)	0.0	7/2$^-$
6020.37 *11*	0.290 *14*	(11051.15)	11/2$^+$,13/2$^+$	5030.31	
6030.69 *10*	0.315 *16*	(11051.15)	11/2$^+$,13/2$^+$	5019.95	
6039.0 *4*	0.022 *1*	6038.55	(9/2$^-$,11/2$^-$)	0.0	7/2$^-$
6134.70 *12*	0.143 *7*	(11051.15)	11/2$^+$,13/2$^+$	4916.09	(9/2$^-$,11/2$^-$,13/2$^-$)
6156.34 *10*	0.72 *4*	(11051.15)	11/2$^+$,13/2$^+$	4894.28	(11/2,13/2,15/2)$^-$
6163.9 *5*	0.021 *1*	6485.45	(9/2,11/2,13/2)$^-$	320.07	5/2$^-$
6258.2 *4*	0.081 *4*	6579.46	(9/2$^-$)	320.07	5/2$^-$
6266.30 *13*	0.157 *8*	6266.0	(11/2$^-$)	0.0	7/2$^-$
6468.13 *15*	0.332 *17*	(11051.15)	11/2$^+$,13/2$^+$	4582.77	(9/2)$^-$
6490.07 *11*	0.95 *5*	(11051.15)	11/2$^+$,13/2$^+$	4560.57	(9/2,11/2)$^-$
6556.75 *11*	0.86 *4*	(11051.15)	11/2$^+$,13/2$^+$	4493.90	(11/2,13/2)$^-$
6603.94 *11*	2.82 *14*	(11051.15)	11/2$^+$,13/2$^+$	4446.68	(9/2,11/2)$^-$
6825.80 *11*	1.92 *10*	(11051.15)	11/2$^+$,13/2$^+$	4224.80	(9/2,11/2)$^-$
6926.52 *11*	3.09 *15*	(11051.15)	11/2$^+$,13/2$^+$	4124.04	(7/2,9/2,11/2)$^-$
7047.93 *18*	0.093 *5*	(11051.15)	11/2$^+$,13/2$^+$	4002.55	(7/2$^-$,9/2$^-$)
7107.25 *12*	0.74 *4*	(11051.15)	11/2$^+$,13/2$^+$	3943.32	
7131.07 *11*	3.10 *16*	(11051.15)	11/2$^+$,13/2$^+$	3919.46	9/2$^-$
7148.31 *11*	3.37 *17*	(11051.15)	11/2$^+$,13/2$^+$	3902.33	(9/2,11/2)$^+$
7176.93 *11*	5.30 *27*	(11051.15)	11/2$^+$,13/2$^+$	3873.69	15/2$^-$
7247.08 *13*	0.355 *18*	(11051.15)	11/2$^+$,13/2$^+$	3803.58	(9/2,11/2)$^-$
7436.54 *12*	7.30 *37*	(11051.15)	11/2$^+$,13/2$^+$	3614.05	(9/2,11/2)$^-$

Continued on next page (footnotes at end of table)

^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ (continued)

$\gamma(^{51}V)$ (continued)

E_γ	I_γ[†][@]	E_i(level)	J_i^π	E_f	J_f^π
7533.46 *14*	0.237 *12*	(11051.15)	$11/2^+,13/2^+$	3517.05	$9/2^-$
7655.2 *3*	0.063 *3*	(11051.15)	$11/2^+,13/2^+$	3395.02	$(13/2)^-$
7665.02 *12*	9.8 *5*	(11051.15)	$11/2^+,13/2^+$	3385.58	$13/2^-$
7672.88 *13*	1.99 *10*	(11051.15)	$11/2^+,13/2^+$	3377.68	$9/2^-$
8350.88 *14*	1.82 *9*	(11051.15)	$11/2^+,13/2^+$	2699.61	$15/2^-$
9236.99 *5*	2.7 *3*	(11051.15)	$11/2^+,13/2^+$	1813.24	$9/2^-$
9440.98 *5*	4.8 *5*	(11051.15)	$11/2^+,13/2^+$	1609.22	$11/2^-$

[†] Photon intensities per 100 neutron captures (relative to Iγ(1609γ)=80 *16*). The uncertainties include systematic uncertainties of 20% for Eγ=400-2000, 10% for Eγ=2000-3000, 5% for Eγ=3000-8500, 10% for Eγ=8500-10000.
[‡] From 1973HaWJ.
[#] σ=14.7 b *22* (1973HaWJ).
[@] Intensity per 100 neutron captures.
[&] Multiply placed with undivided intensity.
[x] γ ray not placed in level scheme.

^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ

Level Scheme

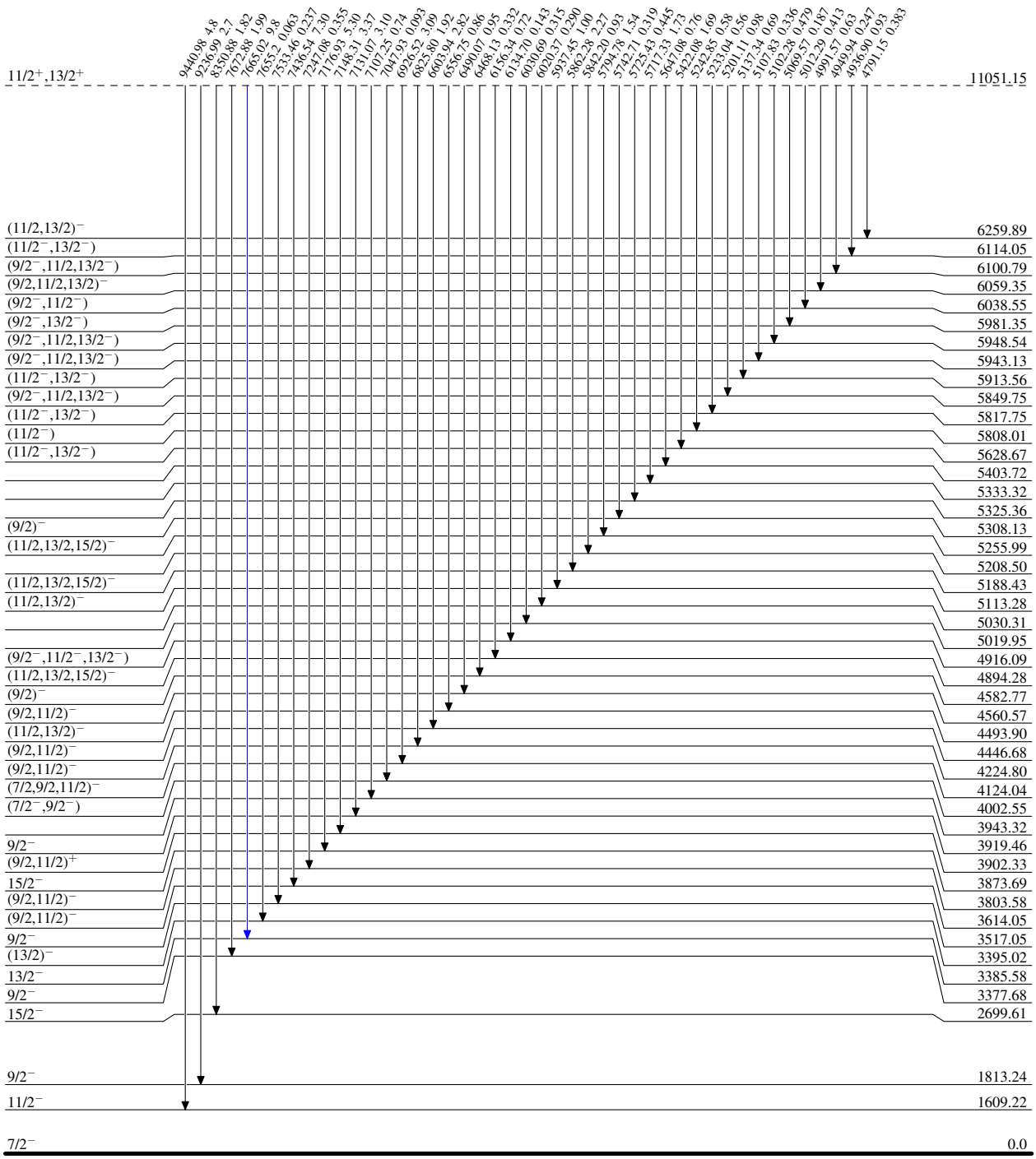
Intensities: Relative I_γ

Legend

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

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

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



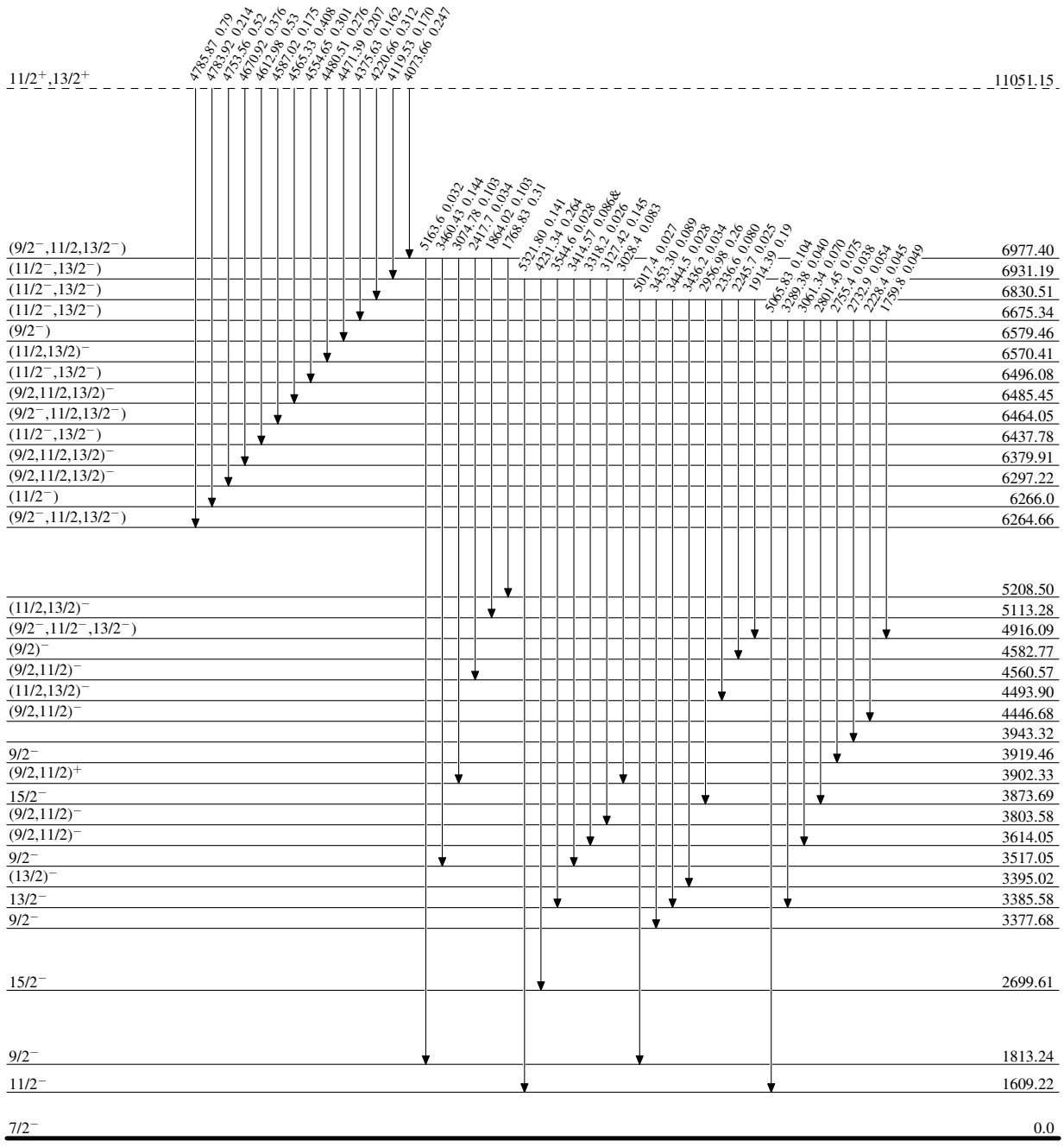
$^{51}_{23}V_{28}$

^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



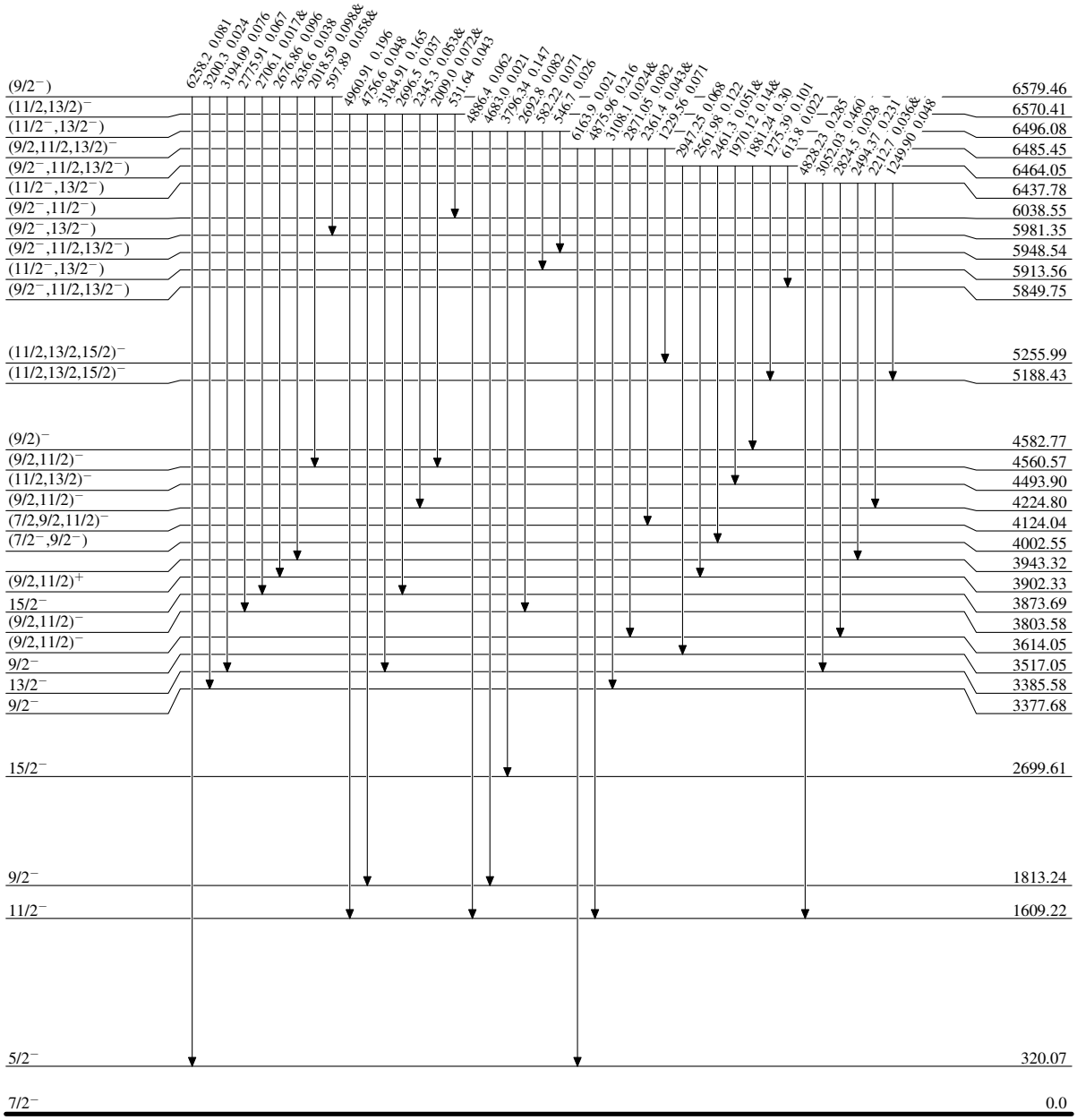
$^{51}_{23}V_{28}$

^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



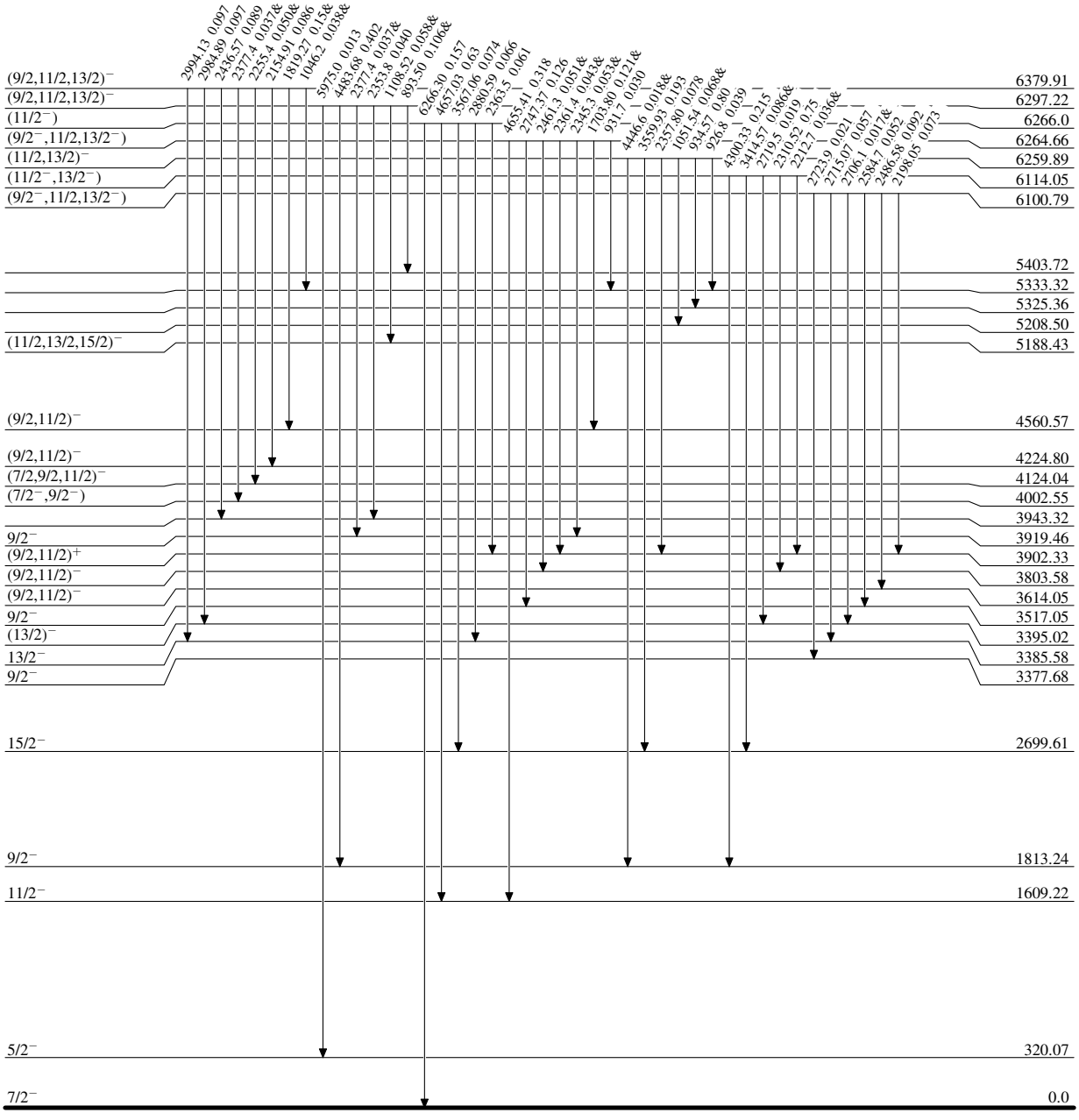
$^{51}_{23}V_{28}$

^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



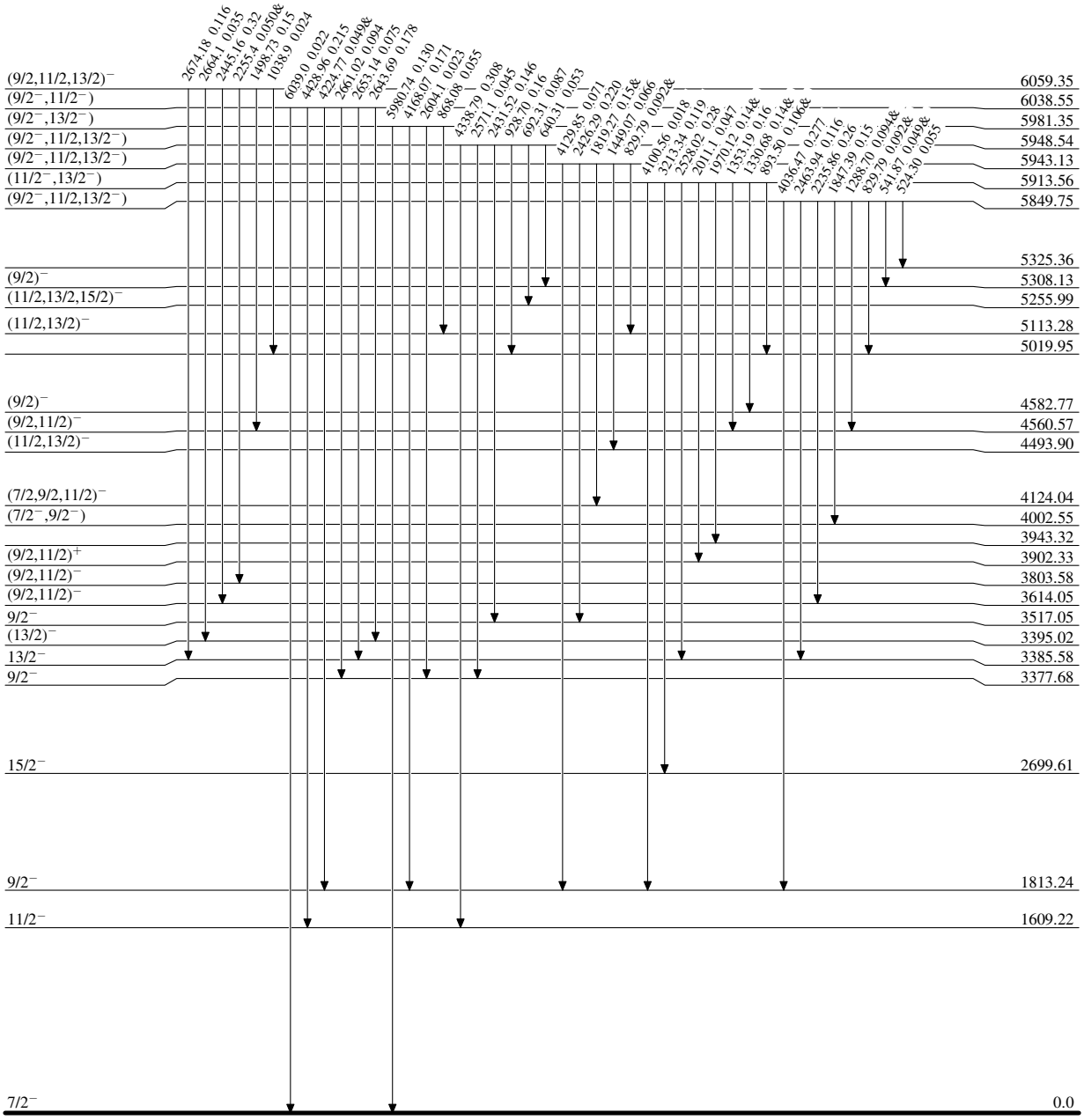
$^{51}_{23}V_{28}$

^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



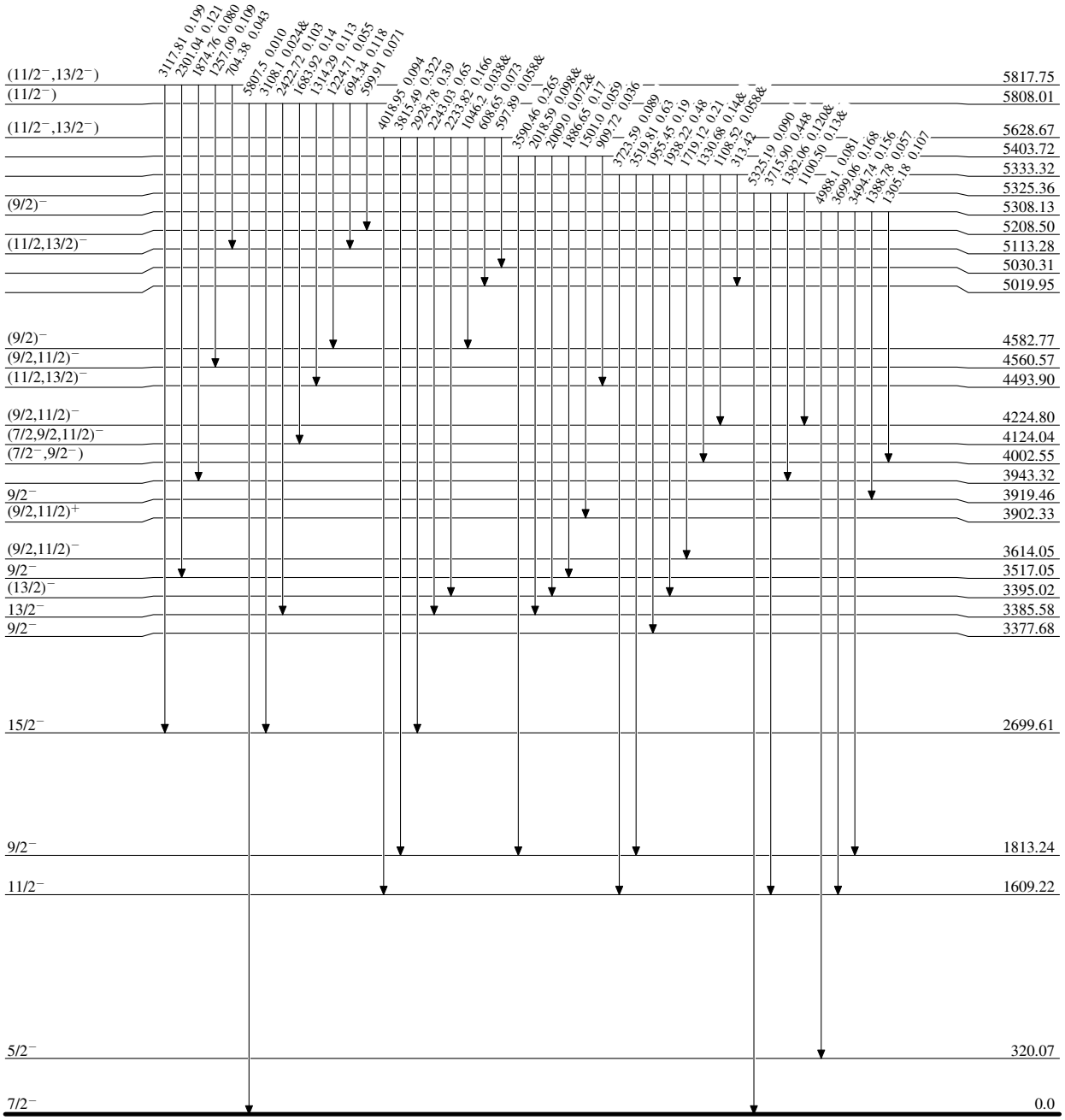
$^{51}_{23}V_{28}$

^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



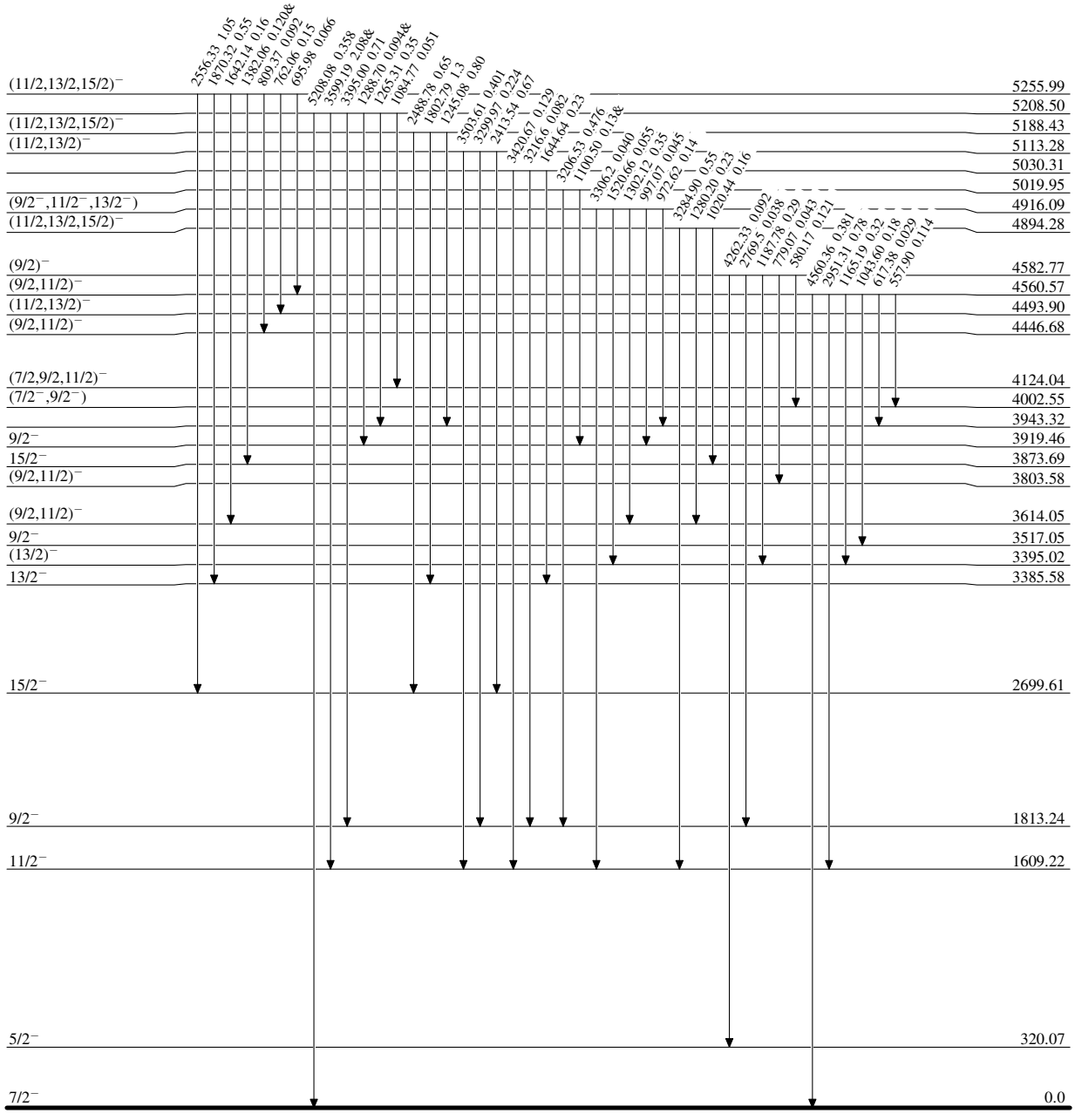
$^{51}_{23}V_{28}$

^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



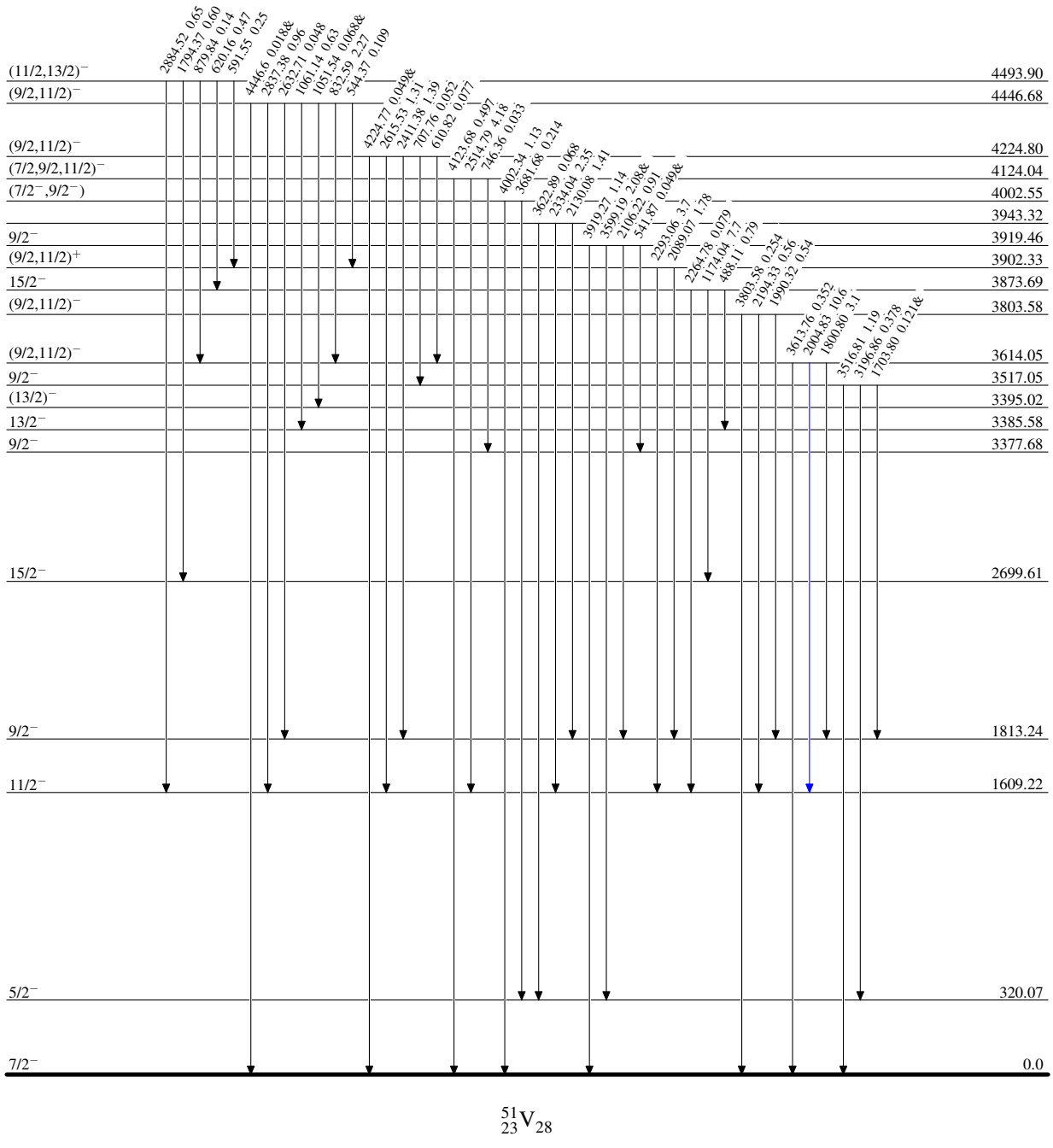
$^{51}_{23}V_{28}$

^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



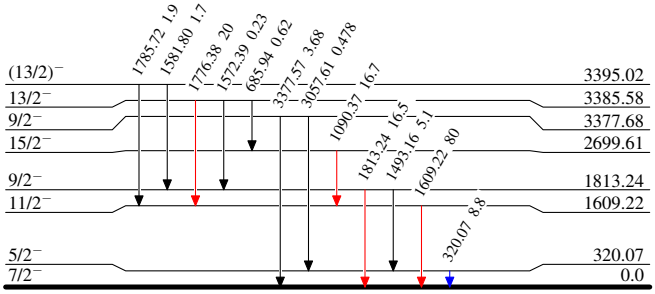
$^{51}_{23}V_{28}$

^{50}V(n,γ) E=thermal 1991Mi08,1978Ro03,1973HaWJ

Level Scheme (continued)

Intensities: Relative I_γ
& Multiply placed: undivided intensity given

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



$^{51}_{23}V_{28}$