

$^{160}\text{Dy}(\text{n},\gamma)$ E=th [1986Sc16,1977Be03](#)

Type	Author	History Citation	Literature Cutoff Date
Full Evaluation	C. W. Reich	NDS 112,2497 (2011)	1-Jun-2011

[Additional information 1.](#)

Data are from (n, γ) reaction with thermal neutrons and resonance-averaging neutron beams with mean energies of 2 and 24 keV as well as (n,ce) reaction with thermal neutrons. γ 's were measured with curved-crystal and pair spectrometers and ce's were measured in a magnetic spectrometer.

The data on the primary γ 's from 2- and 24-keV neutron capture are not shown here. They can be found in [1986Sc16](#).

The level scheme and γ placements are from [1986Sc16](#). They differ considerably from those of [1977Be03](#).

 ^{161}Dy Levels[Additional information 2.](#)

E(level) [†]	J π [‡]
0.0 ^b	5/2 ⁺
25.6521 ^c 8	5/2 ⁻
43.8213 ^b 8	7/2 ⁺
74.5671 ^d 7	3/2 ⁻
100.4053 ^b 21	9/2 ⁺
103.0629 ^c 8	7/2 ⁻
131.7613 ^d 8	5/2 ⁻
201.0883 ^c 11	9/2 ⁻
212.9544 ^d 10	7/2 ⁻
314.9423 ^d 11	9/2 ⁻
366.9755 ^e 11	1/2 ⁻
418.2349 ^e 14	3/2 ⁻
451.4344 ^e 11	5/2 ⁻
550.2544 ^f 16	3/2 ⁺
567.9448 ^e 19	7/2 ⁻
607.5817 ^g 17	1/2 ⁺
609.8328 ^f 21	5/2 ⁺
628.236 ^e 8	9/2 ⁻
633.1690 ^g 16	5/2 ⁺
678.3239 ^h 21	3/2 ⁺
696.079 ^f 13	7/2 ⁺
699.1408 ⁱ 20	3/2 ⁺
730.915 ^h 3	5/2 ⁺
772.7291 ⁱ 21	1/2 ⁺
777.1277 ^j 25	1/2 ⁻
790.647 ^k 12	5/2 ⁻
804.389 ^j 3	3/2 ⁻
825.7168 ^g 24	3/2 ⁺
849.261 ⁱ 4	5/2 ⁺
857.504 ^h 7	(7/2) ⁺
858.7938 ^l 19	3/2 ⁻
867.871 ^j 5	5/2 ⁻
873.091 ^l 3	1/2 ⁻
878.49 ^k 4	7/2 ⁻

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$^{160}\text{Dy}(\text{n},\gamma)$ E=th **1986Sc16,1977Be03** (continued) ^{161}Dy Levels (continued)

E(level) [†]	J ^π [‡]	Comments
922.328 24	5/2 ⁻ , 7/2 ⁻ &	
1004.7 [#] 6	(1/2 ⁺ , 3/2 ⁺)	
1061.3 [#] 6	(1/2 ⁺ , 3/2 ⁺)	
1067.109 9	7/2	
1071.265 7	3/2 ⁻	
1098.226 9	3/2 ⁺	
1122.3 [@] 3		
1132.6 [@] 5		
1141.6 [@] 3		
1147.9 [@] 2		
1154.2 [#] 11	1/2 ⁽⁻⁾ , 3/2 ⁽⁻⁾	J ^π : from L=1 in (d,t). From resonance-averaged n capture, π=+.
1160.4 [@] 5		
1178.328 20	5/2, 7/2 ⁻	
1183.6 [@] 6		
1186.685 11	5/2 ⁻	
1192.5 [@] 2		
1206.935 10	5/2 ⁻	
1268.969 ^m 4	1/2 ⁻	
1302.921 ^m 12	3/2 ⁻	
1319.2 [@] 2		
1336.6 [@] 5		
1350.5 [@] 10		
1357.936 16	1/2 ⁻ , 3/2 ⁻	
1379.343 21	3/2 ⁻	
1399.2 [@] 3		
1401.114 12	5/2, 7/2 ⁺ ^a	
(6454.47 9)	1/2 ⁺	E(level): S(n) value from 1986Sc16 ; neutron-capture “state”. J ^π : from predominantly s-wave n-capture by a 0 ⁺ target.

[†] From least-squares fit to the γ energies, unless noted otherwise. The uncertainties are from the least-squares fit, but with the 10 ppm systematic uncertainty added in quadrature to that from the fit. This fit gives a reduced- χ^2 value of 2.2, which indicates that either the uncertainties of the γ energies (**1986Sc16**) have been underestimated or some of the γ 's are misplaced or multiplets.

[‡] From the Adopted Values.

[#] From primary γ energy in averaged-resonance capture (**1986Sc16**) and no secondary γ 's placed from level.

[@] From primary γ energy in thermal n capture (**1986Sc16**) and no secondary γ 's placed from level.

& **1986Sc16** report J^π=5/2⁻, 7/2, 9/2⁺.

^a **1986Sc16** report J^π=5/2, 7/2.

^b Band(A): 5/2[642] band.

^c Band(B): 5/2[523] band.

^d Band(C): 3/2[521] band.

^e Band(D): 1/2[521] band.

^f Band(E): 3/2[402] band, with 3/2[651] admixture.

^g Band(F): $\Delta N=2$ -mixed 1/2[660]+1/2[400] band. This band may also contain an admixture of the K-2 γ -vibrational band built on the ^{161}Dy g.s. (5/2[642]).

^h Band(G): 3/2[651] band, with 3/2[402] admixture.

ⁱ Band(H): $\Delta N=2$ -mixed 1/2[400] and 1/2[660] band. This band may also contain an admixture of the K-2 γ -vibrational band

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$^{160}\text{Dy}(\text{n},\gamma)$ E=th **1986Sc16,1977Be03** (continued) ^{161}Dy Levels (continued)

built on the ^{161}Dy g.s. (5/2[642]).

^j Band(I): $K^\pi=1/2^-$, K-2 γ -vibrational, band built on 3/2[521].

^k Band(J): 5/2[512] band.

^l Band(K): 1/2[530] band.

^m Band(L): 1/2[510] band.

 $\gamma(^{161}\text{Dy})$

I γ normalization: normalization as given by **1986Sc16**, who assume a g.s. feeding of 93% and assign a 20% systematic uncertainty.

E_γ [†]	I_γ ^{‡a}	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [#]	δ [@]	Comments
25.69 ^{& 3}		25.6521	5/2 ⁻	0.0	5/2 ⁺			
28.83 ^{& 6}	0.05 ⁵	131.7613	5/2 ⁻	103.0629	7/2 ⁻			
43.821 ¹	0.99 ²³	43.8213	7/2 ⁺	0.0	5/2 ⁺	M1+E2	0.216 ⁸	$\alpha(\text{L1})_{\text{exp}}=2.9$ ⁷ . δ : 1986Sc16 report %E2=4.7 ⁷ for this G.
^x 47.707 ³	0.021 ¹³							
48.914 ¹	12.9 ³⁰	74.5671	3/2 ⁻	25.6521	5/2 ⁻	M1+E2	-0.056 ¹	$\alpha(\text{L1})_{\text{exp}}=1.9$ ⁵ . δ : 1986Sc16 report %E2=0.50 ²⁴ for this G.
^x 49.961 ⁶	0.036 ²¹							
^x 52.904 ⁶	0.06 ³							
57.196 ¹	1.7 ⁵	131.7613	5/2 ⁻	74.5671	3/2 ⁻	M1+E2	-0.187 ¹⁶	$\alpha(\text{L1})_{\text{exp}}=1.5$ ⁴ . δ : 1986Sc16 report %E2=2.8 ⁴ for this G.
59.235 ²	0.15 ⁵	103.0629	7/2 ⁻	43.8213	7/2 ⁺			
74.569 ¹	8.8 ¹⁹	74.5671	3/2 ⁻	0.0	5/2 ⁺	E1		$\alpha(\text{K})_{\text{exp}}=0.43$ ¹⁰ .
^x 76.592 ²	0.12 ³							
77.414 ¹	0.34 ⁸	103.0629	7/2 ⁻	25.6521	5/2 ⁻	M1+E2	-1.050 ⁸	$\alpha(\text{L1})_{\text{exp}}=0.20$ ⁶ . δ : 1986Sc16 report mult=E2,M1 for this G.
^x 77.641 ⁹	0.028 ¹⁴							
81.196 ¹	0.99 ²⁵	212.9544	7/2 ⁻	131.7613	5/2 ⁻	M1+E2	0.18 ³	$\alpha(\text{K})_{\text{exp}}=3.8$ ¹⁰ . δ : 1986Sc16 report mult=M1 for this G.
87.942 ¹	0.21 ⁵	131.7613	5/2 ⁻	43.8213	7/2 ⁺			
^x 96.596 ⁴	0.027 ¹²							
98.028 ³	0.052 ¹⁵	201.0883	9/2 ⁻	103.0629	7/2 ⁻	M1+E2	0.9 ²	$\alpha(\text{K})_{\text{exp}}=7.5$ ²⁵ . δ : 1986Sc16 report %E2=11 ⁴ for this γ , which yields a δ value considerably different from the adopted one.
100.413 ⁹	0.039 ¹⁹	100.4053	9/2 ⁺	0.0	5/2 ⁺			
100.707 ¹⁰	0.026 ¹⁴	201.0883	9/2 ⁻	100.4053	9/2 ⁺			
101.990 ¹	0.19 ⁴	314.9423	9/2 ⁻	212.9544	7/2 ⁻			
103.062 ¹	0.70 ¹³	103.0629	7/2 ⁻	0.0	5/2 ⁺	E1		$\alpha(\text{K})_{\text{exp}}=0.103$ ²³ .
106.108 ¹	0.081 ¹⁸	131.7613	5/2 ⁻	25.6521	5/2 ⁻			
112.549 ²	0.071 ¹⁷	212.9544	7/2 ⁻	100.4053	9/2 ⁺			
^x 121.769 ¹¹	0.017 ⁶							
^x 124.928 ¹⁰	0.025 ⁹							
^x 124.950 ⁹	0.025 ⁹							
^x 125.161 ⁸	0.021 ⁶							
^x 131.182 ⁴	0.014 ⁶							
^x 133.685 ⁶	0.013 ⁶							
^x 133.867 ⁶	0.05 ³							

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$^{160}\text{Dy}(n,\gamma) \text{ E=th}$ **1986Sc16,1977Be03** (continued) $\gamma(^{161}\text{Dy})$ (continued)

E_γ †	I_γ ‡ ^a	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. #	Comments
135.669 7	0.023 5	1206.935	5/2 ⁻	1071.265	3/2 ⁻	(E2,M1)	$\alpha(\text{K})\text{exp}=0.53$ 16.
138.385 2	0.30 4	212.9544	7/2 ⁻	74.5671	3/2 ⁻	E2	$\alpha(\text{K})\text{exp}=0.46$ 8.
^x 139.645 8	0.019 5						
^x 142.552 6	0.053 14						
149.723 8	0.018 4	567.9448	7/2 ⁻	418.2349	3/2 ⁻		
150.121 6	0.018 4	849.261	5/2 ⁺	699.1408	3/2 ⁺		
^x 154.171 3	0.035 9						
157.267 1	0.123 15	201.0883	9/2 ⁻	43.8213	7/2 ⁺		
^x 160.466 6	0.017 4						
^x 161.228 13	0.019 8						
^x 163.32 3	0.012 5						
^x 163.553 7	0.022 5						
^x 166.021 13	0.023 5						
^x 166.064 14	0.018 8						
^x 166.219 8	0.014 5						
169.546 5	0.021 5	777.1277	1/2 ⁻	607.5817	1/2 ⁺		
^x 170.400 12	0.048 19						
^x 170.941 3	0.045 5						$\alpha(\text{K})\text{exp}=0.74$ 13. Conversion line may contain contributions from other lines.
171.221 6	0.025 4	804.389	3/2 ⁻	633.1690	5/2 ⁺		
^x 172.749 4	0.064 12						$\alpha(\text{K})\text{exp}=0.39$ 9. Conversion line may contain contributions from other lines.
^x 174.67 4	0.018 8						
^x 174.703 10	0.021 9						
175.433 2	0.104 2	201.0883	9/2 ⁻	25.6521	5/2 ⁻		$\alpha(\text{K})\text{exp}=0.20$ 4. Conversion line may contain contributions from other lines.
^x 176.238 12	0.010 3						
176.800 8	0.028 8	628.236	9/2 ⁻	451.4344	5/2 ⁻		
180.527 22	0.017 3	858.7938	3/2 ⁻	678.3239	3/2 ⁺		
183.179 1	0.110 7	314.9423	9/2 ⁻	131.7613	5/2 ⁻	E2	$\alpha(\text{K})\text{exp}=0.23$ 4.
^x 185.763 10	0.021 4						Mult.: Reported as E1,(E2) by 1986Sc16.
							$\alpha(\text{K})\text{exp}=1.0$ 8. Conversion line may contain contributions from other lines.
187.310 6	0.029 3	212.9544	7/2 ⁻	25.6521	5/2 ⁻		
192.548 3	0.056 4	825.7168	3/2 ⁺	633.1690	5/2 ⁺	M1	$\alpha(\text{K})\text{exp}=0.46$ 9.
194.784 7	0.024 3	873.091	1/2 ⁻	678.3239	3/2 ⁺		
^x 196.434 7	0.027 5						
196.815 6	0.025 4	804.389	3/2 ⁻	607.5817	1/2 ⁺		
199.242 9	0.119 9	1067.109	7/2	867.871	5/2 ⁻		
^x 205.538 25	0.012 4						
^x 208.75 3	0.011 5						
215.899 11	0.024 3	825.7168	3/2 ⁺	609.8328	5/2 ⁺		
225.621 2	0.186 10	858.7938	3/2 ⁻	633.1690	5/2 ⁺		
230.39 3	0.039 13	1098.226	3/2 ⁺	867.871	5/2 ⁻		
^x 230.58 4	0.026 6						
^x 232.966 10	0.031 4						
235.81 3	0.018 10	1302.921	3/2 ⁻	1067.109	7/2		
^x 238.069 4	0.076 18						
238.481 2	0.91 3	451.4344	5/2 ⁻	212.9544	7/2 ⁻		
239.428 11	0.017 3	849.261	5/2 ⁺	609.8328	5/2 ⁺		
^x 240.322 5	0.033 4						
244.62 4	0.049 13	696.079	7/2 ⁺	451.4344	5/2 ⁻		
247.55 ^b 6	0.030 ^b 20	699.1408	3/2 ⁺	451.4344	5/2 ⁻		
247.55 ^b 6	0.030 ^b 20	857.504	(7/2) ⁺	609.8328	5/2 ⁺		
251.197 7	0.115 11	858.7938	3/2 ⁻	607.5817	1/2 ⁺		
^x 252.522 14	0.025 4						

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$^{160}\text{Dy}(n,\gamma) \text{ E=th } \textbf{1986Sc16,1977Be03 (continued)}$ $\gamma(^{161}\text{Dy})$ (continued)

E_γ †	I_γ ‡a	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. #	Comments
253.004 3	0.132 10	567.9448	7/2 ⁻	314.9423	9/2 ⁻	M1,E2	$\alpha(\text{K})\text{exp}=0.14$ 3.
*256.237 24	0.026 5						
*259.084 3	0.122 11						$\alpha(\text{K})\text{exp}=0.07$ 3. Conversion line may contain contributions from other lines.
*259.32 3	0.042 13						
*263.473 3	0.116 7						
265.504 4	0.072 6	873.091	1/2 ⁻	607.5817	1/2 ⁺		
*266.180 20	0.027 5						
*271.473 7	0.041 7						
*276.226 14	0.013 4						
*281.407 9	0.035 3						
286.476 2	2.84 12	418.2349	3/2 ⁻	131.7613	5/2 ⁻	M1	$\alpha(\text{K})\text{exp}=0.106$ 13.
292.409 1	8.8 5	366.9755	1/2 ⁻	74.5671	3/2 ⁻	M1	$\alpha(\text{K})\text{exp}=0.103$ 13.
299.006 5	0.027 3	849.261	5/2 ⁺	550.2544	3/2 ⁺		
*299.519 21	0.018 3						
*305.711 11	0.016 3						
*308.954 23	0.044 17						
313.306 20	0.014 5	628.236	9/2 ⁻	314.9423	9/2 ⁻		
313.602 20	0.028 7	1186.685	5/2 ⁻	873.091	1/2 ⁻		
*314.705 17	0.013 3						
315.175 3	0.090 4	418.2349	3/2 ⁻	103.0629	7/2 ⁻		$\alpha(\text{K})\text{exp}=0.16$ 3. Conversion line may contain contributions from other lines.
*315.84 4	0.038 17						
319.673 1	1.37 8	451.4344	5/2 ⁻	131.7613	5/2 ⁻	M1	$\alpha(\text{K})\text{exp}=0.083$ 10.
*320.01 3	0.039 18						
*320.783 10	0.031 16						
*322.691 12	0.019 5						
*324.043 3	0.059 3						
325.741 16	0.013 3	777.1277	1/2 ⁻	451.4344	5/2 ⁻		
*329.527 2	0.142 9						
*330.14 4	0.019 5						
*330.225 23	0.022 5						
*333.714 24	1.12 16						
340.354 13	0.024 4	1071.265	3/2 ⁻	730.915	5/2 ⁺		
341.320 2	0.48 3	366.9755	1/2 ⁻	25.6521	5/2 ⁻	E2	$\alpha(\text{K})\text{exp}=0.037$ 6.
343.664 2	2.79 20	418.2349	3/2 ⁻	74.5671	3/2 ⁻	M1	$\alpha(\text{K})\text{exp}=0.063$ 8.
*346.39 4	0.07 3						
*346.87 4	0.071 25						
348.371 3	0.236 21	451.4344	5/2 ⁻	103.0629	7/2 ⁻		
*352.927 3	0.134 17						
354.488 15	0.22 5	772.7291	1/2 ⁺	418.2349	3/2 ⁻		
354.989 2	0.287 22	567.9448	7/2 ⁻	212.9544	7/2 ⁻		$\alpha(\text{K})\text{exp}=0.046$ 17.
360.966 15	0.029 4	1186.685	5/2 ⁻	825.7168	3/2 ⁺		$\alpha(\text{K})\text{exp}=0.38$ 9. Conversion line may contain contributions from other lines.
*364.75 6	0.025 6						
*366.286 22	0.015 3						
366.845 8	0.082 13	567.9448	7/2 ⁻	201.0883	9/2 ⁻		
*368.424 10	0.031 4						
*370.012 3	0.186 6						
371.00 4	0.017 7	1067.109	7/2	696.079	7/2 ⁺		
373.930 20	0.015 2	1178.328	5/2,7/2 ⁻	804.389	3/2 ⁻		
374.276 6	0.076 23	825.7168	3/2 ⁺	451.4344	5/2 ⁻		
*374.425 13	0.038 10						
*376.439 4	0.255 13						
376.869 5	0.285 16	451.4344	5/2 ⁻	74.5671	3/2 ⁻	M1,E2	$\alpha(\text{K})\text{exp}=0.054$ 13.
392.63 4	0.82 20	418.2349	3/2 ⁻	25.6521	5/2 ⁻		

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$^{160}\text{Dy}(n,\gamma) \text{E=th}$ **1986Sc16,1977Be03 (continued)** $\gamma(^{161}\text{Dy})$ (continued)

E_γ †	I_γ ‡a	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. #	Comments
$^x393.80$ 3	0.021 4						
$^x394.76$ 5	0.019 4						
$^x395.975$ 18	0.024 3						
396.881 4	0.158 8	609.8328	5/2 ⁺	212.9544	7/2 ⁻		
$^x399.84$ 3	0.183 19						
$^x400.40$ 3	0.022 5						
$^x401.256$ 18	0.045 17						
$^x403.602$ 6	0.079 21						
405.753 2	0.177 17	772.7291	1/2 ⁺	366.9755	1/2 ⁻		
406.071 7	0.045 11	857.504	(7/2) ⁺	451.4344	5/2 ⁻		$\alpha(\text{K})_{\text{exp}}=1.12$ 22. Conversion line may contain contributions from other lines.
407.365 3	0.139 16	858.7938	3/2 ⁻	451.4344	5/2 ⁻		
$^x408.243$ 3	0.120 22						
$^x409.80$ 3	0.032 18						
410.171 3	0.177 18	1268.969	1/2 ⁻	858.7938	3/2 ⁻		
416.442 13	0.056 6	867.871	5/2 ⁻	451.4344	5/2 ⁻		
418.494 3	0.38 3	550.2544	3/2 ⁺	131.7613	5/2 ⁻		
420.27 3	0.027 5	633.1690	5/2 ⁺	212.9544	7/2 ⁻		
425.784 4	0.122 12	451.4344	5/2 ⁻	25.6521	5/2 ⁻		
$^x431.53$ 5	0.209 24						
$^x432.05$ 3	0.022 4						
$^x436.203$ 3	0.148 10						
438.053 22	0.031 6	1071.265	3/2 ⁻	633.1690	5/2 ⁺		
$^x442.223$ 4	0.188 24						
443.28 3	0.024 4	1268.969	1/2 ⁻	825.7168	3/2 ⁺		
444.168 23	0.031 8	1302.921	3/2 ⁻	858.7938	3/2 ⁻		
$^x444.546$ 6	0.052 12						
449.635 11	0.057 6	867.871	5/2 ⁻	418.2349	3/2 ⁻		
454.857 5	0.102 7	873.091	1/2 ⁻	418.2349	3/2 ⁻	M1,(E2)	$\alpha(\text{K})_{\text{exp}}=0.035$ 7.
458.737 5	0.152 20	825.7168	3/2 ⁺	366.9755	1/2 ⁻		
461.437 8	0.120 10	1071.265	3/2 ⁻	609.8328	5/2 ⁺		
$^x462.440$ 8	0.077 22						
464.879 19	0.104 15	567.9448	7/2 ⁻	103.0629	7/2 ⁻		$\alpha(\text{K})_{\text{exp}}=0.059$ 15. Conversion line may contain contributions from other lines.
465.00 3	0.24 4	1098.226	3/2 ⁺	633.1690	5/2 ⁺		$\alpha(\text{K})_{\text{exp}}=0.020$ 5. Conversion line may contain contributions from other lines.
$^x467.664$ 23	0.026 11						
$^x469.599$ 6	0.11 3					M1,E2	$\alpha(\text{K})_{\text{exp}}=0.027$ 7.
$^x473.93$ 5	0.25 3						
475.687 2	0.88 9	550.2544	3/2 ⁺	74.5671	3/2 ⁻		
$^x477.51$ 7	0.057 23						
478.083 6	0.169 24	609.8328	5/2 ⁺	131.7613	5/2 ⁻		
478.778 23	0.101 17	1401.114	5/2,7/2 ⁺	922.328	5/2 ⁻ ,7/2 ⁻		
483.14 4	0.028 8	696.079	7/2 ⁺	212.9544	7/2 ⁻		
$^x484.50$ 3	0.29 6						
$^x485.377$ 8	0.105 9						
$^x490.531$ 11	0.057 7						
$^x490.85$ 4	0.026 5						
491.856 7	0.235 15	1268.969	1/2 ⁻	777.1277	1/2 ⁻	M1	$\alpha(\text{K})_{\text{exp}}=0.025$ 4.
$^x493.888$ 4	0.302 15					M1	$\alpha(\text{K})_{\text{exp}}=0.029$ 4.
506.131 8	0.132 17	873.091	1/2 ⁻	366.9755	1/2 ⁻	M1,E2	$\alpha(\text{K})_{\text{exp}}=0.022$ 6.
$^x513.42$ 11	0.14 7						$\alpha(\text{K})_{\text{exp}}=0.11$ 5. Conversion line may contain contributions from other lines.
$^x514.61$ 7	0.23 6						$\alpha(\text{K})_{\text{exp}}=0.021$ 7. Conversion line may contain contributions from other lines.
517.962 4	0.24 3	730.915	5/2 ⁺	212.9544	7/2 ⁻		

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$^{160}\text{Dy}(n,\gamma) \text{ E=th}$ **1986Sc16,1977Be03 (continued)** $\gamma(^{161}\text{Dy})$ (continued)

E_γ [†]	I_γ ^{‡a}	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. #	δ [@]	Comments
520.87 7	0.22 5	1071.265	3/2 ⁻	550.2544	3/2 ⁺			
^x 521.003 5	0.205 24							
530.176 15	0.12 3	1302.921	3/2 ⁻	772.7291	1/2 ⁺			
532.750 10	0.217 23	633.1690	5/2 ⁺	100.4053	9/2 ⁺			$\alpha(\text{K})_{\text{exp}}=0.016$ 3. Conversion line may contain contributions from other lines.
533.012 6	0.36 3	607.5817	1/2 ⁺	74.5671	3/2 ⁻	E1		$\alpha(\text{K})_{\text{exp}}=0.0093$ 19. Mult.: Reported as E2,E1 by 1986Sc16 .
^x 533.122 15	0.38 7							
535.260 4	0.303 14	609.8328	5/2 ⁺	74.5671	3/2 ⁻			
^x 538.15 4	0.079 23							
541.6 4	0.13 11	567.9448	7/2 ⁻	25.6521	5/2 ⁻			$\alpha(\text{K})_{\text{exp}}=0.018$ 5.
546.564 3	0.64 4	678.3239	3/2 ⁺	131.7613	5/2 ⁻	E1		$\alpha(\text{K})_{\text{exp}}=0.0035$ 8. Conversion line may contain contributions from other lines.
^x 549.396 13	0.18 3							
550.251 3	1.74 11	550.2544	3/2 ⁺	0.0	5/2 ⁺	M1+E2		$\alpha(\text{K})_{\text{exp}}=0.0156$ 20. δ : 1986Sc16 report %E2=43 19, but 1983Ri15 report $\delta=-0.040$ 35 or $-3.8+4-7$, from ^{161}Tb β^- decay.
551.848 23	0.044 5	1401.114	5/2,7/2 ⁺	849.261	5/2 ⁺			
^x 552.390 8	0.140 10					M1,E2		$\alpha(\text{K})_{\text{exp}}=0.140$ 10.
553.535 ^b 23	0.041 ^b 4	1186.685	5/2 ⁻	633.1690	5/2 ⁺			
553.535 ^b 23	0.041 ^b 4	1357.936	1/2 ⁻ ,3/2 ⁻	804.389	3/2 ⁻			
^x 554.569 16	0.106 13							
^x 554.809 3	0.49 3					M1		$\alpha(\text{K})_{\text{exp}}=0.0190$ 25.
558.601 9	0.149 13	633.1690	5/2 ⁺	74.5671	3/2 ⁻			
566.011 4	0.79 5	609.8328	5/2 ⁺	43.8213	7/2 ⁺	E2+M1	1.2 +7-4	$\alpha(\text{K})_{\text{exp}}=0.0131$ 18. δ : computed by the evaluator from %M1=42 19 (1986Sc16).
567.382 3	0.59 3	699.1408	3/2 ⁺	131.7613	5/2 ⁻	E1		$\alpha(\text{K})_{\text{exp}}=0.0014$ 8.
^x 573.626 19	0.18 3							
^x 578.346 9	0.132 11							
580.83 3	0.053 7	1357.936	1/2 ⁻ ,3/2 ⁻	777.1277	1/2 ⁻			
^x 585.965 4	0.382 22							$\alpha(\text{K})_{\text{exp}}=0.0075$ 13. Conversion line may contain contributions from other lines.
^x 586.13 10	0.23 6							$\alpha(\text{K})_{\text{exp}}=0.012$ 4. Conversion line may contain contributions from other lines.
^x 588.101 10	0.289 16							
^x 588.29 10	0.22 6							$\alpha(\text{K})_{\text{exp}}=0.012$ 4. Conversion line may contain contributions from other lines.
589.343 2	1.33 8	633.1690	5/2 ⁺	43.8213	7/2 ⁺	E2+M1	1.4 +8-4	$\alpha(\text{K})_{\text{exp}}=0.0111$ 14. δ : computed by the evaluator from %M1=34 17 (1986Sc16).
^x 590.779 5	0.400 24					E2+M1	1.2 +7-4	$\alpha(\text{K})_{\text{exp}}=0.0118$ 18. δ : computed by the evaluator from %M1=43 21 (1986Sc16).
595.64 4	0.059 12	696.079	7/2 ⁺	100.4053	9/2 ⁺			
^x 598.832 14	0.098 9							
599.144 9	0.258 20	730.915	5/2 ⁺	131.7613	5/2 ⁻			
^x 601.37 5	0.040 11							
602.235 22	0.082 12	1379.343	3/2 ⁻	777.1277	1/2 ⁻			

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$^{160}\text{Dy}(n,\gamma) \text{ E=th}$ **1986Sc16,1977Be03 (continued)** $\gamma(^{161}\text{Dy})$ (continued)

E_γ †	I_γ ‡a	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. #	δ @	Comments
603.756 3	1.26 9	678.3239	3/2 ⁺	74.5671	3/2 ⁻	E1		$\alpha(\text{K})\text{exp}=0.0019$ 4.
^x 604.845 8	0.257 19							
607.579 2	2.18 14	607.5817	1/2 ⁺	0.0	5/2 ⁺	E2		$\alpha(\text{K})\text{exp}=0.0065$ 8.
609.828 6	0.316 24	609.8328	5/2 ⁺	0.0	5/2 ⁺	E2		$\alpha(\text{K})\text{exp}=0.0085$ 21. Mult.: Reported as E2,(E1) by 1986Sc16 .
^x 611.128 9	0.199 18							
^x 615.184 21	0.047 14							
^x 616.180 24	0.072 9							
^x 616.684 8	0.223 13							
^x 617.69 4	0.042 10							
618.64 4	0.076 11	1186.685	5/2 ⁻	567.9448	7/2 ⁻			
624.571 3	0.94 7	699.1408	3/2 ⁺	74.5671	3/2 ⁻	E1		$\alpha(\text{K})\text{exp}=0.0025$ 5. Conversion line may contain contributions from other lines.
^x 627.206 17	0.099 13							
627.78 5	0.054 13	730.915	5/2 ⁺	103.0629	7/2 ⁻			
^x 628.538 16	0.135 10							
^x 632.631 15	0.220 17							
^x 633.885 22	0.25 3							
^x 636.782 23	0.14 3							
^x 638.018 14	0.18 4							
644.66 8	0.41 8	857.504	(7/2) ⁺	212.9544	7/2 ⁻	E1		$\alpha(\text{K})\text{exp}=0.0040$ 12. Conversion line may contain contributions from other lines.
^x 644.809 5	0.75 5					E1		$\alpha(\text{K})\text{exp}=0.0022$ 5. Conversion line may contain contributions from other lines.
645.30 6	0.11 3	777.1277	1/2 ⁻	131.7613	5/2 ⁻			
646.791 11	0.328 19	1098.226	3/2 ⁺	451.4344	5/2 ⁻			
654.924 9	0.38 3	867.871	5/2 ⁻	212.9544	7/2 ⁻	E2		0.0069 14.
656.360 10	0.43 3	730.915	5/2 ⁺	74.5671	3/2 ⁻			
^x 664.739 22	0.066 13							
665.39 5	0.063 11	878.49	7/2 ⁻	212.9544	7/2 ⁻			
672.625 4	0.99 6	804.389	3/2 ⁻	131.7613	5/2 ⁻	M1+E2	1.0 4	$\alpha(\text{K})\text{exp}=0.00120$ 16. δ : computed by the evaluator from %E2 49 20, from 1986Sc16 .
^x 675.19 16	0.054 25							
678.324 3	1.25 8	678.3239	3/2 ⁺	0.0	5/2 ⁺	M1		$\alpha(\text{K})\text{exp}=0.0113$ 16.
680.00 3	0.133 20	1098.226	3/2 ⁺	418.2349	3/2 ⁻			
^x 684.28 4	0.073 12							
687.085 7	0.387 17	730.915	5/2 ⁺	43.8213	7/2 ⁺	M1		$\alpha(\text{K})\text{exp}=0.0117$ 16.
687.614 24	0.151 13	790.647	5/2 ⁻	103.0629	7/2 ⁻			
696.080 16	0.244 21	696.079	7/2 ⁺	0.0	5/2 ⁺			
699.135 5	0.85 8	699.1408	3/2 ⁺	0.0	5/2 ⁺	M1		$\alpha(\text{K})\text{exp}=0.0109$ 16.
702.561 3	2.03 18	777.1277	1/2 ⁻	74.5671	3/2 ⁻	M1+E2	0.9 5	$\alpha(\text{K})\text{exp}=0.0084$ 13. δ : computed by the evaluator from %E2=46 23 (1986Sc16).
704.30 10	0.13 3	1071.265	3/2 ⁻	366.9755	1/2 ⁻			
^x 710.38 5	0.104 13							
^x 711.911 15	0.297 16							
^x 715.84 5	0.18 4							
721.34 8	0.084 17	922.328	5/2 ⁻ , 7/2 ⁻	201.0883	9/2 ⁻			
727.035 6	0.79 3	858.7938	3/2 ⁻	131.7613	5/2 ⁻	E2+M1	1.5 +12-5	$\alpha(\text{K})\text{exp}=0.0066$ 10. δ : computed by the evaluator from %M1=32 20 (1986Sc16).

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$^{160}\text{Dy}(n,\gamma) \text{ E=th } \textbf{1986Sc16,1977Be03 (continued)}$ $\gamma(^{161}\text{Dy})$ (continued)

E_γ †	I_γ ‡ ^a	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. #	δ @	Comments
729.815 6	0.87 5	804.389	3/2 ⁻	74.5671	3/2 ⁻	E2+M1	1.2 +8-4	$\alpha(\text{K})\text{exp}=0.0070$ 10. δ : computed by the evaluator from %M1 40 20, from 1986Sc16 .
730.91 3	0.14 3	730.915	5/2 ⁺	0.0	5/2 ⁺			$\alpha(\text{K})\text{exp}=0.010$ 3. Conversion line may contain contributions from other lines.
731.251 20	0.25 3	1098.226	3/2 ⁺	366.9755	1/2 ⁻			$\alpha(\text{K})\text{exp}=0.0055$ 15. Conversion line may contain contributions from other lines.
^x 733.28 5	0.106 17							
736.097 8	0.41 4	867.871	5/2 ⁻	131.7613	5/2 ⁻	E2		$\alpha(\text{K})\text{exp}=0.0058$ 12.
746.89 ^b 6	0.15 ^b 4	790.647	5/2 ⁻	43.8213	7/2 ⁺			
746.89 ^b 6	0.15 ^b 4	878.49	7/2 ⁻	131.7613	5/2 ⁻			
751.18 3	0.31 3	825.7168	3/2 ⁺	74.5671	3/2 ⁻	E1		$\alpha(\text{K})\text{exp}=0.0040$ 10. Mult.: Reported as E2,E1 by 1986Sc16 .
^x 757.637 20	0.285 21					M1,E2		$\alpha(\text{K})\text{exp}=0.0083$ 18.
764.984 16	0.378 24	790.647	5/2 ⁻	25.6521	5/2 ⁻	E2,M1		$\alpha(\text{K})\text{exp}=0.0062$ 11.
^x 768.37 3	0.29 4							$\alpha(\text{K})\text{exp}=0.014$ 3. Conversion line may contain contributions from other lines.
^x 770.755 17	0.48 3					E2,M1		$\alpha(\text{K})\text{exp}=0.0063$ 10.
^x 771.28 4	0.27 4							
772.726 6	1.30 10	772.7291	1/2 ⁺	0.0	5/2 ⁺	E2		$\alpha(\text{K})\text{exp}=0.0033$ 5. Mult.: Reported as E2,(E1) by 1986Sc16 .
778.70 4	0.214 24	804.389	3/2 ⁻	25.6521	5/2 ⁻			
781.926 12	0.57 5	825.7168	3/2 ⁺	43.8213	7/2 ⁺	E2		$\alpha(\text{K})\text{exp}=0.0039$ 9. Mult.: Reported as E2,(E1) by 1986Sc16 .
^x 782.30 4	0.20 3							
784.24 3	0.32 3	858.7938	3/2 ⁻	74.5671	3/2 ⁻	M1,E2		$\alpha(\text{K})\text{exp}=0.0068$ 14.
790.61 3	0.29 4	790.647	5/2 ⁻	0.0	5/2 ⁺			
793.346 17	0.37 6	867.871	5/2 ⁻	74.5671	3/2 ⁻			
798.508 7	1.22 11	873.091	1/2 ⁻	74.5671	3/2 ⁻	M1,(E2)		$\alpha(\text{K})\text{exp}=0.0065$ 10.
805.437 15	0.375 23	849.261	5/2 ⁺	43.8213	7/2 ⁺	M1,E2		$\alpha(\text{K})\text{exp}=0.0073$ 15.
^x 809.32 5	0.159 16					(M1,E2)		$\alpha(\text{K})\text{exp}=0.009$ 3.
811.44 13	0.097 15	1379.343	3/2 ⁻	567.9448	7/2 ⁻			
^x 815.32 12	0.061 16							
825.705 10	0.73 4	825.7168	3/2 ⁺	0.0	5/2 ⁺	E2		$\alpha(\text{K})\text{exp}=0.0036$ 5.
^x 827.83 20	0.047 21							
^x 828.73 15	0.082 22							
831.83 3	0.392 25	857.504	(7/2) ⁺	25.6521	5/2 ⁻			
834.86 8	0.134 19	878.49	7/2 ⁻	43.8213	7/2 ⁺			
^x 838.72 17	0.12 4							
840.02 17	0.12 4	1206.935	5/2 ⁻	366.9755	1/2 ⁻			
^x 842.37 4	1.14 6					E1		$\alpha(\text{K})\text{exp}\leq 0.0019$ 4. (Value corrected for a contribution from a line from the 842.59 γ , assumed to be E1.).
^x 842.59 3	0.52 10							$\alpha(\text{K})\text{exp}=0.0056$ 15.
^x 844.854 22	0.27 4					M1,E2		$\alpha(\text{K})\text{exp}=0.0077$ 18.
847.59 ^b 17	0.088 ^b 24	873.091	1/2 ⁻	25.6521	5/2 ⁻			
847.59 ^b 17	0.088 ^b 24	922.328	5/2 ⁻ , 7/2 ⁻	74.5671	3/2 ⁻			
850.863 14	0.70 6	1401.114	5/2, 7/2 ⁺	550.2544	3/2 ⁺			$\alpha(\text{K})\text{exp}=0.0046$ 10.

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$^{160}\text{Dy}(\text{n},\gamma) \text{E=th}$ **1986Sc16,1977Be03 (continued)** $\gamma(^{161}\text{Dy})$ (continued)

E_γ [†]	I_γ ^{‡a}	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. [#]	Comments
^x 852.18 3	0.51 4						
852.73 8	0.21 3	878.49	7/2 ⁻	25.6521	5/2 ⁻		$\alpha(\text{K})\text{exp}=0.012$ 4. Conversion line may contain contributions from other lines.
854.11 4	0.18 3	1067.109	7/2	212.9544	7/2 ⁻		
^x 862.26 10	0.21 4						
^x 865.15 23	0.19 5						
866.32 18	0.14 5	1067.109	7/2	201.0883	9/2 ⁻		
^x 868.21 15	0.16 4						
^x 870.74 14	0.19 5						
^x 872.33 9	0.35 6						
^x 895.2 4	0.23 14						
^x 896.47 3	0.37 4						$\alpha(\text{K})\text{exp}=0.0075$ 16.
901.85 19	0.22 8	1268.969	1/2 ⁻	366.9755	1/2 ⁻		
^x 902.26 19	0.37 7						
^x 903.05 13	0.29 5						
^x 910.34 20	0.16 5						
^x 915.99 14	0.28 7						
922.03 11	0.21 3	922.328	5/2 ⁻ , 7/2 ⁻	0.0	5/2 ⁺		
927.58 12	0.16 3	1379.343	3/2 ⁻	451.4344	5/2 ⁻		
935.29 8	0.29 4	1067.109	7/2	131.7613	5/2 ⁻		
939.66 3	0.34 3	1357.936	1/2 ⁻ , 3/2 ⁻	418.2349	3/2 ⁻		
^x 941.93 5	0.225 25						
949.9 3	0.086 25	1401.114	5/2, 7/2 ⁺	451.4344	5/2 ⁻		
^x 955.06 7	0.47 8						
^x 959.31 23	0.13 4						
965.52 12	0.16 4	1178.328	5/2, 7/2 ⁻	212.9544	7/2 ⁻		
966.4 ^b 3	0.12 ^b 4	1067.109	7/2	100.4053	9/2 ⁺		
966.4 ^b 3	0.12 ^b 4	1098.226	3/2 ⁺	131.7613	5/2 ⁻		
^x 986.87 10	0.30 4						
^x 989.89 18	0.17 4						
^x 1005.13 3	0.92 8					E2,M1	$\alpha(\text{K})\text{exp}=0.0035$ 8.
1006.1 3	0.15 6	1206.935	5/2 ⁻	201.0883	9/2 ⁻		
^x 1007.2 3	0.19 6						
1011.8 3	0.24 6	1379.343	3/2 ⁻	366.9755	1/2 ⁻		
^x 1015.07 7	0.26 3						
^x 1027.2 3	0.14 4						
^x 1034.75 22	0.096 25						
^x 1036.64 14	0.17 3						
^x 1047.18 4	0.56 13					(E2,E1)	$\alpha(\text{K})\text{exp}=0.0022$ 7.
^x 1049.35 23	0.99 21						
^x 1060.84 16	0.11 3						
^x 1064.2 3	0.07 3						
1066.94 10	0.17 3	1067.109	7/2	0.0	5/2 ⁺		$\alpha(\text{K})\text{exp}=0.0034$ 15.
^x 1070.18 23	0.08 3						
^x 1074.2 3	0.12 3						
^x 1079.26 11	0.47 7						
^x 1087.90 17	0.34 7						
^x 1091.26 9	0.73 15						
1098.13 14	0.52 8	1098.226	3/2 ⁺	0.0	5/2 ⁺		
^x 1100.67 15	0.23 3						
^x 1102.25 19	0.17 3						
^x 1109.11 12	0.66 6					E2,E1	$\alpha(\text{K})\text{exp}=0.0016$ 4.
^x 1110.4 3	0.29 4						
1132.8 4	0.65 8	1206.935	5/2 ⁻	74.5671	3/2 ⁻	E2	$\alpha(\text{K})\text{exp}=0.0017$ 4.
1134.66 22	0.28 5	1178.328	5/2, 7/2 ⁻	43.8213	7/2 ⁺		Mult.: Reported as E2,E1 by 1986Sc16.

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$^{160}\text{Dy}(n,\gamma)$ E=th **1986Sc16,1977Be03** (continued) $\gamma(^{161}\text{Dy})$ (continued)

E_γ †	I_γ ‡a	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. #	Comments
$^{x1137.04}_{17}$	0.50 7						
1142.92 21	0.26 4	1186.685	5/2 ⁻	43.8213	7/2 ⁺		
$^{x1151.36}_{23}$	0.23 4						
1153.3 3	0.23 7	1178.328	5/2,7/2 ⁻	25.6521	5/2 ⁻		
$^{x1154.5}_{3}$	0.22 4						
$^{x1156.85}_{12}$	0.45 5						
$^{x1158.55}_{13}$	0.47 5						
1161.33 22	0.20 4	1186.685	5/2 ⁻	25.6521	5/2 ⁻		
1165.8 3	0.26 7	1379.343	3/2 ⁻	212.9544	7/2 ⁻		
$^{x1174.6}_{3}$	0.34 8						$\alpha(\text{K})\text{exp}=0.0041$ 13. Conversion line may contain contributions from other lines.
1181.44 22	0.51 9	1206.935	5/2 ⁻	25.6521	5/2 ⁻		
$^{x1208.38}_{17}$	0.40 5					(M1,E2)	$\alpha(\text{K})\text{exp}=0.0034$ 10.
$^{x1213.8}_{3}$	0.21 6						
1225.9 3	0.34 9	1357.936	1/2 ⁻ ,3/2 ⁻	131.7613	5/2 ⁻		
1227.94 21	0.61 9	1302.921	3/2 ⁻	74.5671	3/2 ⁻		
$^{x1232.23}_{15}$	0.55 8						
$^{x1234.7}_{4}$	0.33 14						
$^{x1240.2}_{3}$	0.24 7						
1247.46 10	0.50 6	1379.343	3/2 ⁻	131.7613	5/2 ⁻	M1,(E2)	$\alpha(\text{K})\text{exp}=0.0037$ 8.
$^{x1250.0}_{4}$	0.25 9						$\alpha(\text{K})\text{exp}=0.0044$ 20.
$^{x1256.81}_{13}$	0.50 16						
$^{x1263.5}_{4}$	0.28 9						
1268.5 6	0.48 18	1401.114	5/2,7/2 ⁺	131.7613	5/2 ⁻		
$^{x1270.3}_{10}$	0.35 16						
$^{x1281.4}_{3}$	0.47 8						
1283.48 6	1.38 22	1357.936	1/2 ⁻ ,3/2 ⁻	74.5671	3/2 ⁻		$\alpha(\text{K})\text{exp}=0.0020$ 11.
$^{x1287.37}_{19}$	0.40 8						
1297.6 3	0.36 9	1401.114	5/2,7/2 ⁺	103.0629	7/2 ⁻		
1302.7 6	0.37 9	1302.921	3/2 ⁻	0.0	5/2 ⁺		
$^{x1303.98}_{13}$	0.70 17						
1332.85 24	0.64 15	1357.936	1/2 ⁻ ,3/2 ⁻	25.6521	5/2 ⁻		
$^{x1342.64}_{11}$	0.70 7						
$^{x1350.74}_{10}$	1.0 3						
$^{x1354.8}_{3}$	0.54 13						
1356.4 4	0.40 9	1401.114	5/2,7/2 ⁺	43.8213	7/2 ⁺		
$^{x1360.8}_{3}$	0.73 18						
$^{x1363.6}_{4}$	0.30 9						
$^{x1365.91}_{23}$	0.61 9						
$^{x1370.57}_{16}$	1.00 12					E1	$\alpha(\text{K})\text{exp}=0.0004$ 3.
1375.3 5	0.39 11	1401.114	5/2,7/2 ⁺	25.6521	5/2 ⁻		
$^{x1377.1}_{5}$	0.35 10						
1379.5 4	0.41 10	1379.343	3/2 ⁻	0.0	5/2 ⁺		
$^{x1388.2}_{7}$	0.30 15						
$^{x1391.89}_{14}$	0.77 13						
$^{x1394.3}_{4}$	0.62 16						
1401.5 4	0.43 10	1401.114	5/2,7/2 ⁺	0.0	5/2 ⁺		
$^{x1404.00}_{17}$	0.59 9						
$^{x1413.9}_{4}$	0.32 9						
$^{x1422.1}_{3}$	0.47 9						
$^{x1428.1}_{4}$	0.31 8						
$^{x1433.3}_{4}$	0.50 6						
$^{x1438.36}_{12}$	0.77 11						
$^{x1448.7}_{3}$	0.56 10						
$^{x1453.5}_{5}$	0.39 9						
$^{x1456.9}_{4}$	0.41 10						

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$^{160}\text{Dy}(n,\gamma) \text{E=th}$ **1986Sc16,1977Be03 (continued)** $\gamma(^{161}\text{Dy})$ (continued)

E_γ †	I_γ ‡a	$E_i(\text{level})$	J_i^π	E_f	J_f^π
$^{x}1462.80$ 17	0.63 9				
$^{x}1464.5$ 4	0.54 10				
$^{x}1467.7$ 4	0.38 9				
$^{x}1475.3$ 5	0.48 10				
$^{x}1478.1$ 3	0.55 9				
$^{x}1488.6$ 4	0.36 12				
$^{x}1489.76$ 21	0.41 6				
$^{x}1492.2$ 4	0.20 5				
$^{x}1495.5$ 3	0.30 5				
$^{x}1501.52$ 22	0.42 5				
$^{x}1504.89$ 23	0.45 6				
$^{x}1516.54$ 20	0.51 7				
$^{x}1521.2$ 3	0.29 12				
$^{x}1523.12$ 23	0.50 7				
$^{x}1526.7$ 11	0.35 18				
$^{x}1528.31$ 22	0.71 9				
$^{x}1529.8$ 4	0.49 16				
$^{x}1531.6$ 3	0.53 8				
$^{x}1535.08$ 23	0.54 8				
$^{x}1541.1$ 9	0.30 15				
$^{x}1542.5$ 6	0.54 10				
$^{x}1553.3$ 3	0.37 7				
$^{x}1561.24$ 22	0.48 7				
$^{x}1567.9$ 4	0.41 12				
$^{x}1586.14$ 21	0.75 9				
$^{x}1604.70$ 15	0.21 7				
$^{x}1610.76$ 13	0.30 9				
$^{x}1665.7$ 5	0.74 17				
$^{x}1702.4$ 6	0.78 18				
$^{x}1717.3$ 3	1.30 18				
$^{x}1722.5$ 3	0.99 17				
$^{x}1729.2$ 5	0.66 17				
5055.2 3	0.52 5	(6454.47)	1/2 ⁺	1399.2	
5074.9 3	1.4 5	(6454.47)	1/2 ⁺	1379.343	3/2 ⁻
5096.4	4.36 25	(6454.47)	1/2 ⁺	1357.936	1/2 ⁻ , 3/2 ⁻
5103.9 10	0.26 8	(6454.47)	1/2 ⁺	1350.5	
5117.8 5	0.47 8	(6454.47)	1/2 ⁺	1336.6	
5135.2 2	1.77 12	(6454.47)	1/2 ⁺	1319.2	
5151.3 2	1.43 11	(6454.47)	1/2 ⁺	1302.921	3/2 ⁻
5261.9 2	0.29 3	(6454.47)	1/2 ⁺	1192.5	
5270.8 6	0.64 4	(6454.47)	1/2 ⁺	1183.6	
5275.0 4	0.14 3	(6454.47)	1/2 ⁺	1178.328	5/2, 7/2 ⁻
5294.0 5	0.19 3	(6454.47)	1/2 ⁺	1160.4	
5306.5 2	0.41 3	(6454.47)	1/2 ⁺	1147.9	
5312.8 3	0.243 21	(6454.47)	1/2 ⁺	1141.6	
5321.8 5	0.120 21	(6454.47)	1/2 ⁺	1132.6	
5332.1 3	0.66 7	(6454.47)	1/2 ⁺	1122.3	
5356.0 2	0.73 4	(6454.47)	1/2 ⁺	1098.226	3/2 ⁺
5382.9 3	0.54 5	(6454.47)	1/2 ⁺	1071.265	3/2 ⁻
5594.8 4	0.59 8	(6454.47)	1/2 ⁺	858.7938	3/2 ⁻
5649.0 7	0.28 7	(6454.47)	1/2 ⁺	804.389	3/2 ⁻
5677.6 2	3.21 19	(6454.47)	1/2 ⁺	777.1277	1/2 ⁻
5844.6 2	1.46 13	(6454.47)	1/2 ⁺	609.8328	5/2 ⁺
6035.95 13	2.68 14	(6454.47)	1/2 ⁺	418.2349	3/2 ⁻
6087.25 13	18.3 10	(6454.47)	1/2 ⁺	366.9755	1/2 ⁻
6379.5 2	0.178 13	(6454.47)	1/2 ⁺	74.5671	3/2 ⁻

Continued on next page (footnotes at end of table)

 $^{160}\text{Dy}(\text{n},\gamma) \text{ E=th}$ **1986Sc16,1977Be03 (continued)**

 $\gamma(^{161}\text{Dy})$ (continued)

[†] From 1986Sc16, unless otherwise noted. A systematic uncertainty of 10 ppm must be added (1986Sc16) to the quoted value to obtain the total uncertainty. Other: 1977Be03.

[‡] From 1986Sc16, unless otherwise noted. The 20% systematic uncertainty noted by 1986Sc16 is included here in the normalization factor. Other: 1977Be03. Note that 1977Be03 quote their γ -intensity data in units of barns and point out that there may be large errors in some of these data and in the normalization.

[#] From ce data of 1986Sc16.

[@] Values obtained as discussed in the Adopted Gammas data set. Those from (n, γ) are deduced from L-subshell ratios reported by 1986Sc16 from a study of the conversion electrons associated with the capture γ rays.

[&] From 1977Be03.

^a For intensity per 100 neutron captures, multiply by 1.0 2.

^b Multiply placed with undivided intensity.

^x γ ray not placed in level scheme.

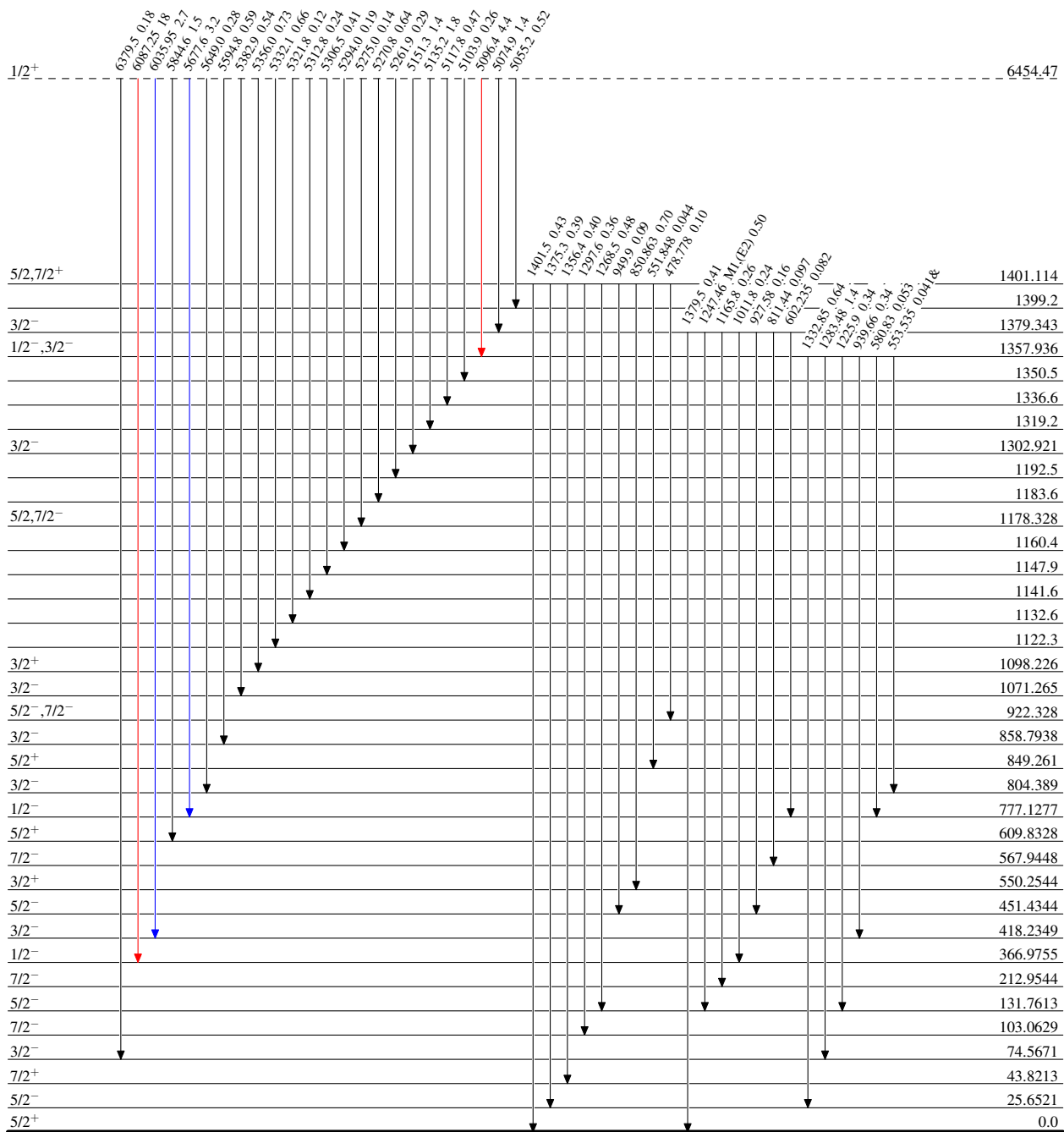
$^{160}\text{Dy}(n,\gamma) \text{E=th}$ 1986Sc16,1977Be03

Level Scheme

Intensities: I_γ per 100 neutron captures
& Multiply placed: undivided intensity given

Legend

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

 $^{161}_{66}\text{Dy}_{95}$

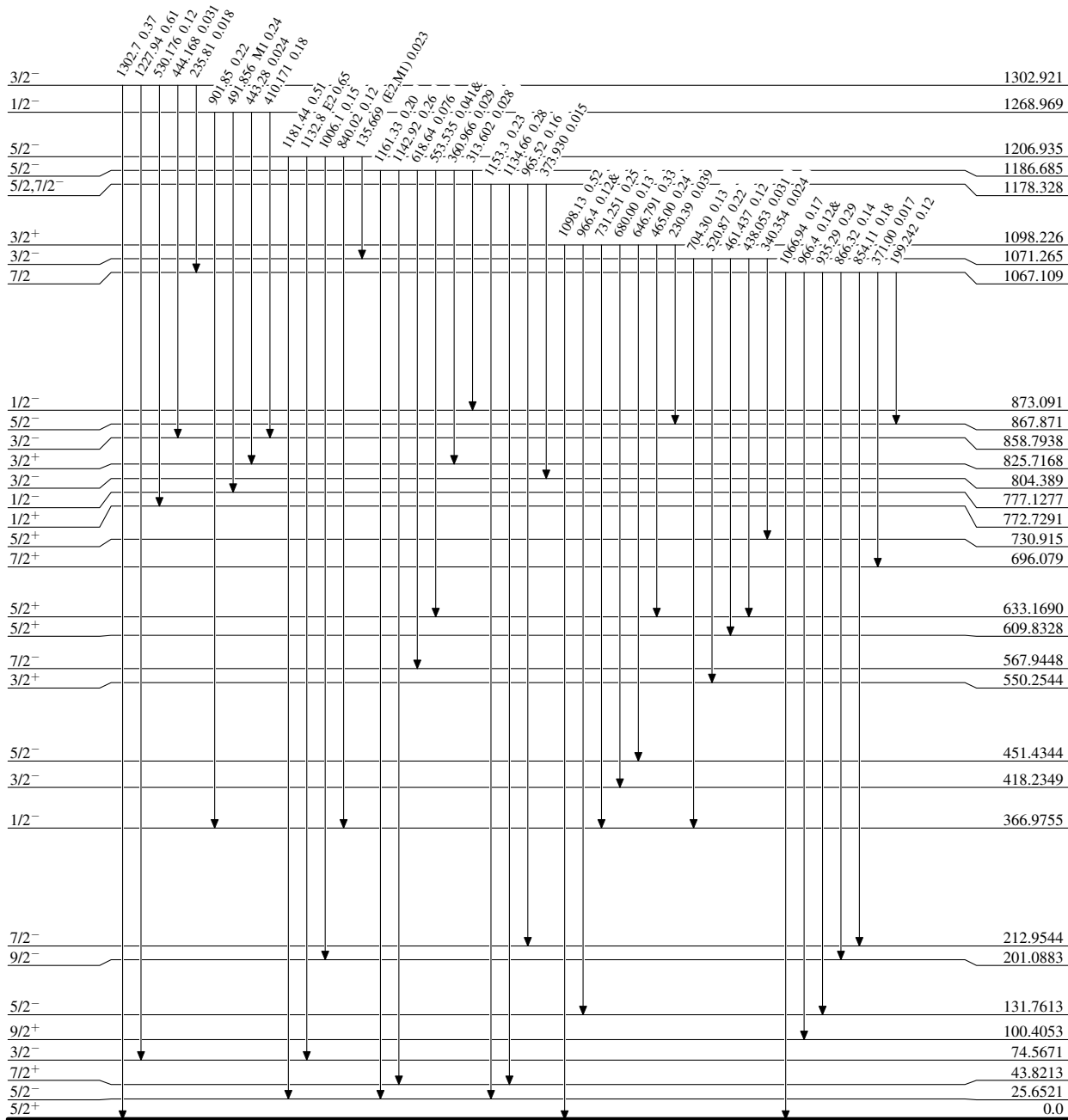
$^{160}\text{Dy}(n,\gamma) \text{ E=th}$ 1986Sc16,1977Be03

Level Scheme (continued)

Legend

Intensities: I_γ per 100 neutron captures
& Multiply placed: undivided intensity given

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

 $^{161}_{66}\text{Dy}_{95}$

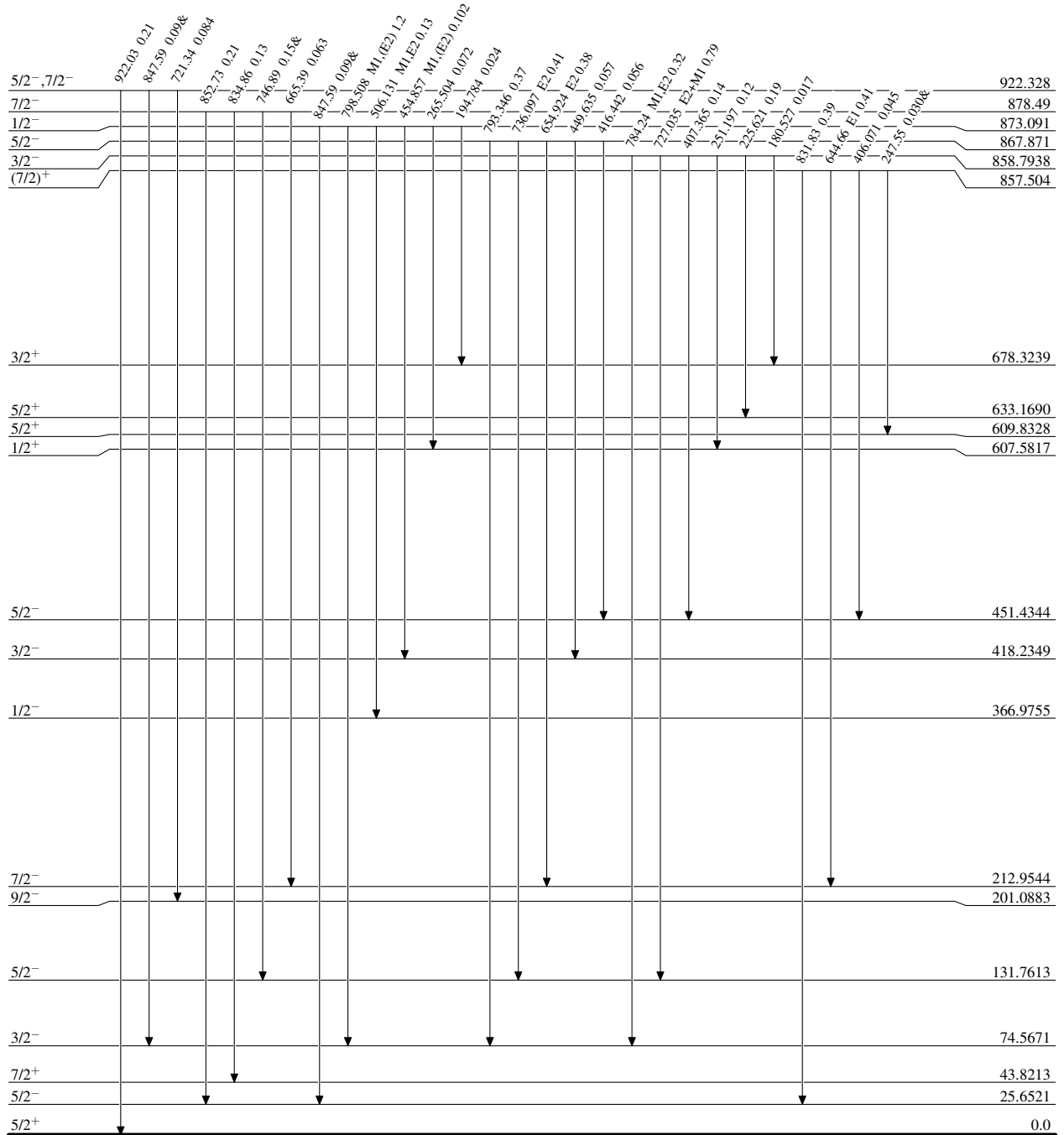
$^{160}\text{Dy}(n,\gamma) \text{E=th}$ 1986Sc16,1977Be03

Level Scheme (continued)

Intensities: I_γ per 100 neutron captures
& Multiply placed: undivided intensity given

Legend

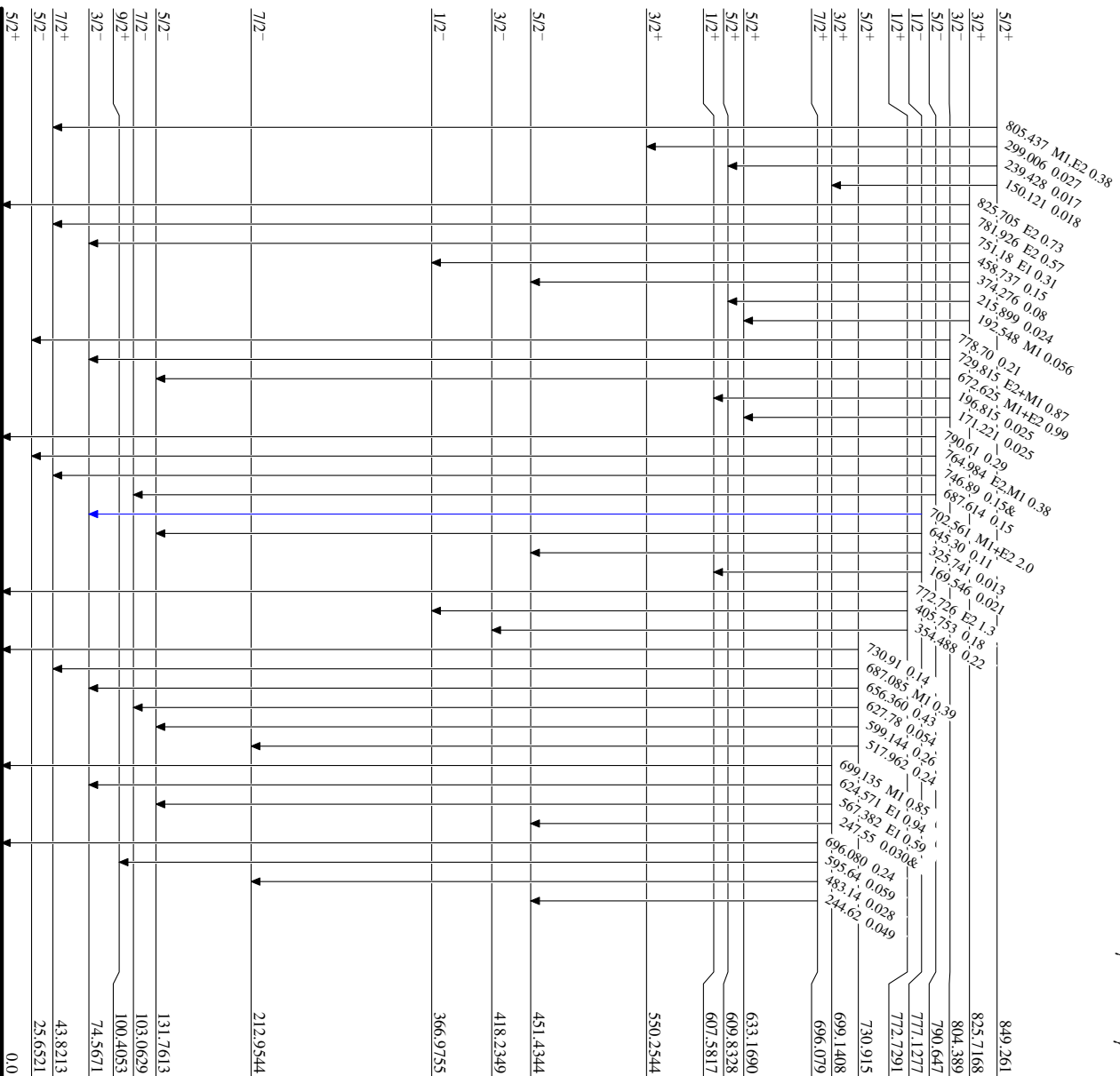
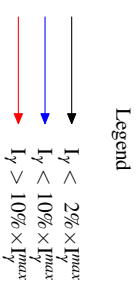
—→ $I_\gamma < 2\% \times I_\gamma^{\max}$
 —→ $I_\gamma < 10\% \times I_\gamma^{\max}$
 —→ $I_\gamma > 10\% \times I_\gamma^{\max}$

 $^{161}_{66}\text{Dy}_{95}$

¹⁶⁰Dy(n,γ) E=th 1986Sc16,1977Be03

Level Scheme (continued)

Intensities: I_γ per 100 neutron captures
& Multiplied placed: undivided intensity given

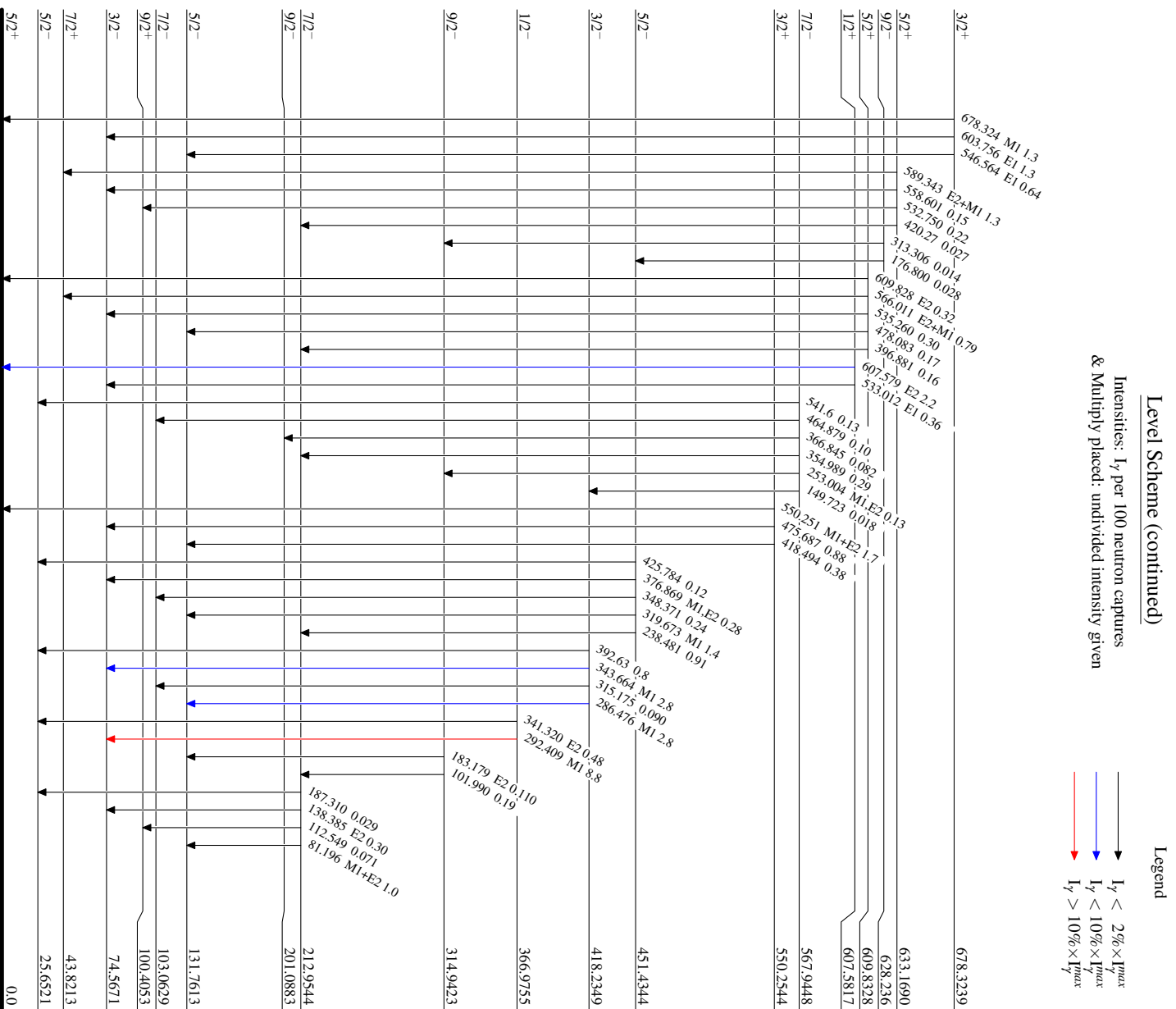


¹⁶¹Dy₉₅

$^{160}\text{Dy}(n,\gamma)$	E=th	1986Sc16,1977Be03
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Level Scheme (continued)

Intensities: I_γ per 100 neutron captures
& Multiply placed: undivided intensity given



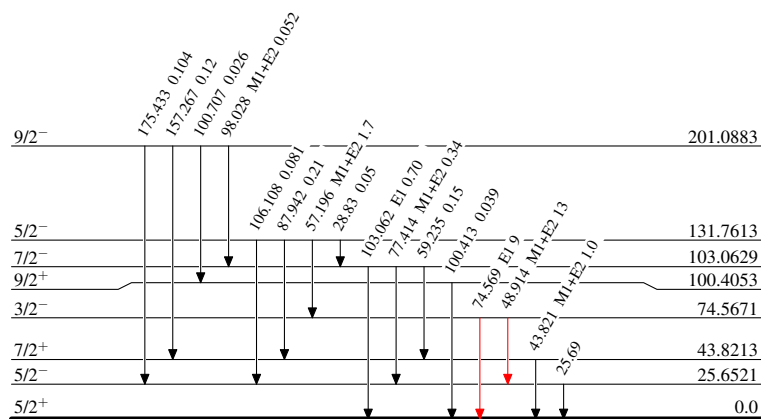
$^{160}\text{Dy}(n,\gamma) \text{ E=th}$ 1986Sc16,1977Be03

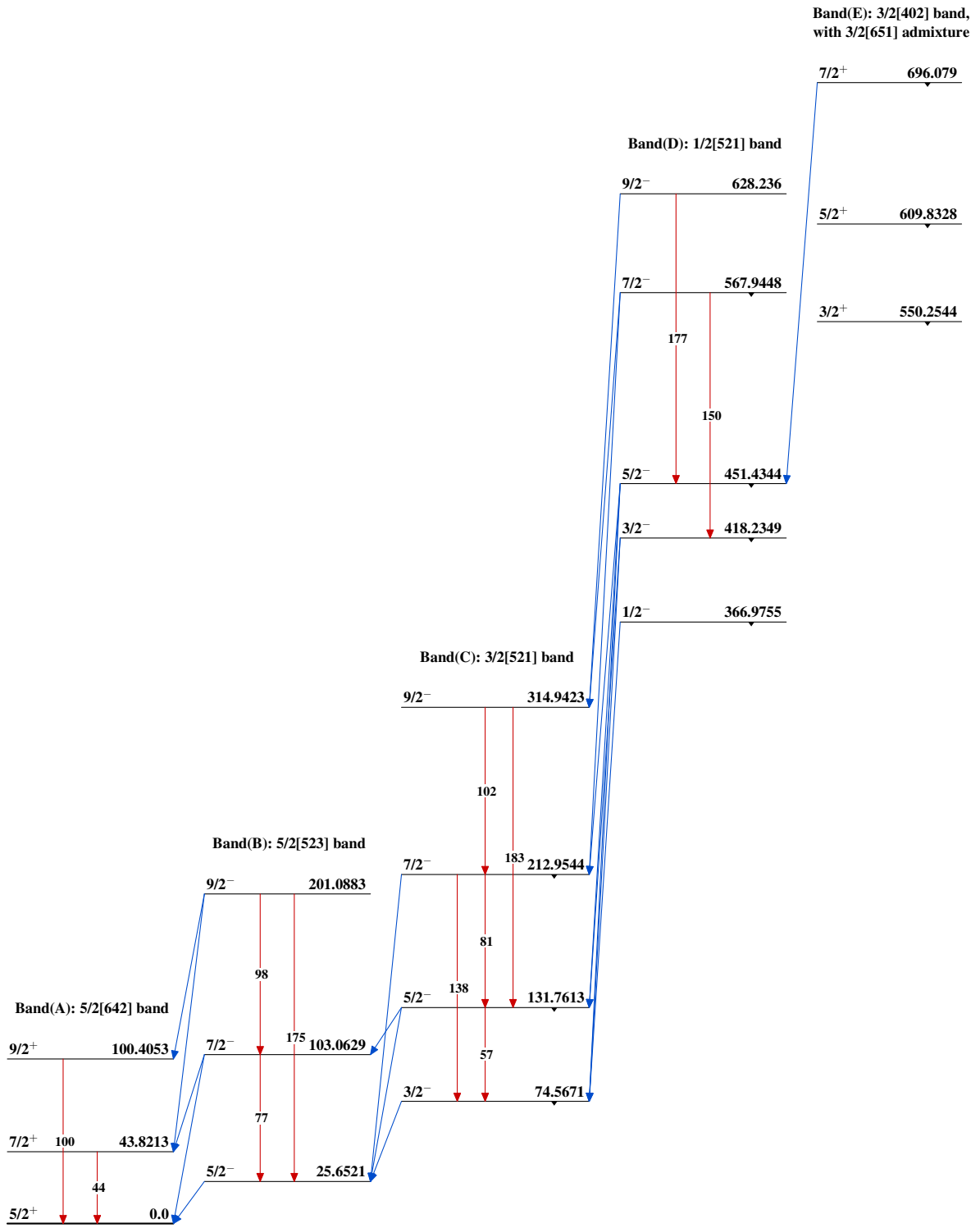
Level Scheme (continued)

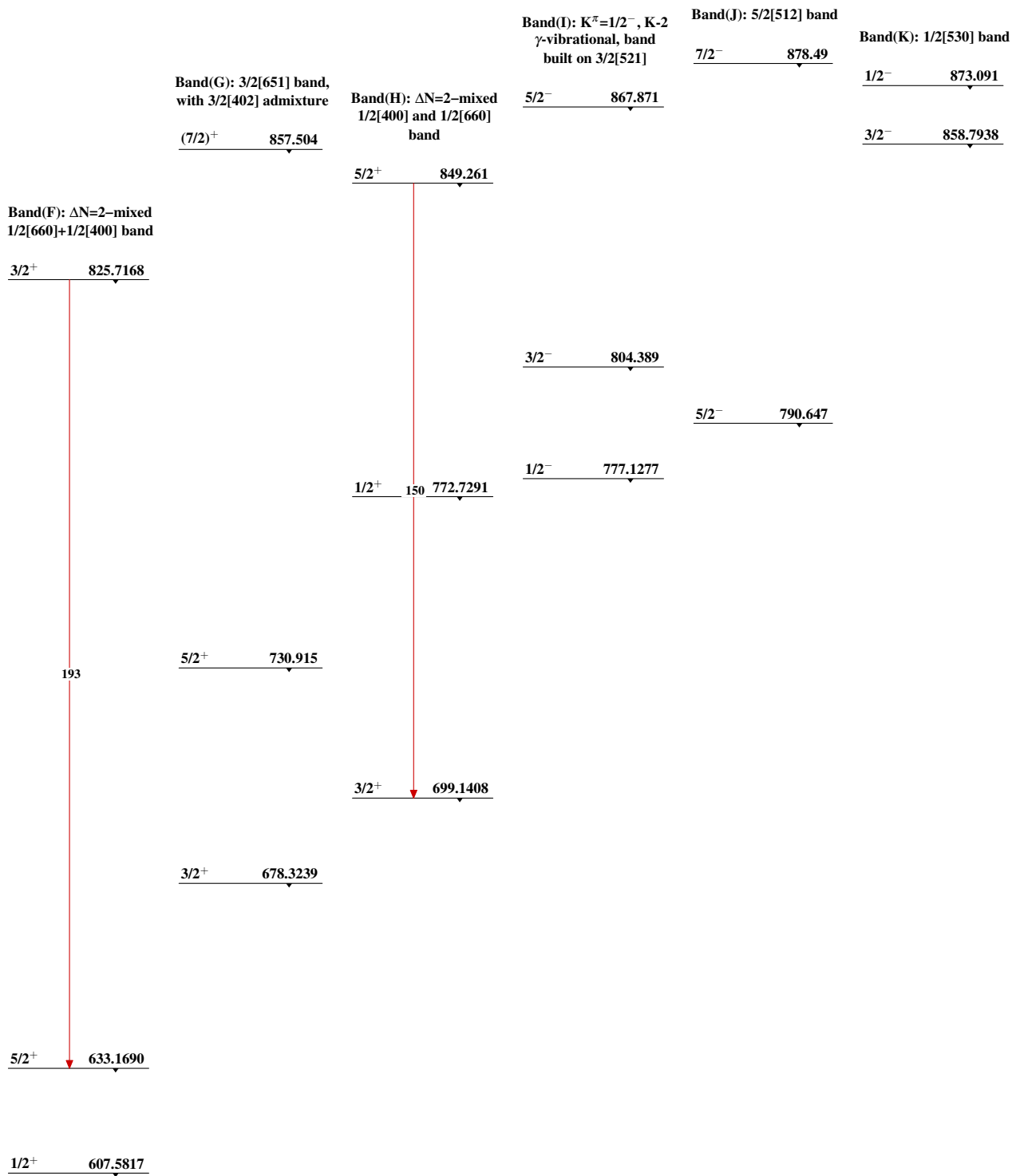
Intensities: I_γ per 100 neutron captures
& Multiply placed: undivided intensity given

Legend

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

 $^{161}_{66}\text{Dy}_{95}$

$^{160}\text{Dy}(n,\gamma) \text{ E=th}$ 1986Sc16,1977Be03 $^{161}_{66}\text{Dy}_{95}$

$^{160}\text{Dy}(\text{n},\gamma) \text{E=th}$ 1986Sc16,1977Be03 (continued)


 $^{160}\text{Dy}(\text{n},\gamma) \text{ E=th}$ **1986Sc16,1977Be03 (continued)**

Band(L): 1/2[510] band

3/2⁻ 1302.921

1/2⁻ 1268.969

$^{161}_{66}\text{Dy}_{95}$