

$^{74}\text{Se}(n,\gamma)$  E=thermal:placed  $\gamma$  1984To11,1982ToZS,1981En07

Type	Author	History	Citation	Literature Cutoff Date
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Dataset for placed  $\gamma$  rays. See a separate dataset for a large number of unplaced  $\gamma$  rays.

1984To11,1982ToZS: both references (1982ToZT is a thesis) are from the same lab; measured  $\gamma$ , ce; enriched target.

Curved-crystal spectrometers were used for  $\gamma$  rays below 2 MeV and pair spectrometer was used for  $\gamma$  rays above 2 MeV.

1981En07: three-crystal-pair spectrometer was used, measured primary and secondary  $\gamma$  rays.

2007ChZX: PGAA-database. In measurements of elemental cross sections at Budapest, 18 secondary and 2 primary gamma rays were identified for  $^{75}\text{Se}$ . These are listed under document records.

Others: 1984NeZR, 1983Ah01, 1973Ak02, 1970Ru06, 1967Dr03.

The level scheme is from 1984To11 and primary  $\gamma$  data of 1981En07, 1984To11, 1973Ak02.

 $^{75}\text{Se}$  Levels

E(level)	$J^{\pi\dagger}$	E(level)	$J^{\pi\dagger}$	E(level)	$J^{\pi\dagger}$
0.0	5/2 <sup>+</sup>	1047.185 8	5/2 <sup>-</sup> ,7/2 <sup>-</sup>	2030.36 <sup>#</sup> 12	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
112.3875 12	7/2 <sup>+</sup>	1073.825 3	5/2 <sup>-</sup>	2166.69 <sup>#</sup> 10	1/2,3/2,5/2 <sup>+</sup>
133.040 3	9/2 <sup>+</sup>	1144.459 18	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	2242.09 <sup>#</sup> 16	
286.5710 21	3/2 <sup>-</sup>	1184.188 5	1/2,3/2,5/2	2271.22 <sup>#</sup> 16	
293.105 3	1/2 <sup>-</sup>	1198.535 4	5/2 <sup>+</sup>	2456.43 <sup>#</sup> 7	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
427.8849 21	5/2 <sup>-</sup>	1245.244 7	3/2 <sup>-</sup>	2565.39 <sup>#</sup> 7	1/2 <sup>+</sup>
585.9507 23	3/2 <sup>-</sup>	1301.707 17	5/2,7/2	2597.78 <sup>#</sup> 9	1/2,3/2,5/2 <sup>+</sup>
610.715 3	1/2 <sup>+</sup>	1374.513 18	1/2,3/2,5/2	2631.81 <sup>#</sup> 9	1/2 <sup>+</sup>
628.4308 22	5/2 <sup>+</sup>	1431.96 6		2737.41 <sup>#</sup> 8	1/2,3/2,5/2 <sup>+</sup>
663.9565 23	5/2 <sup>-</sup>	1454.676 18		2782.08 <sup>#</sup> 10	
747.6492 25	7/2 <sup>-</sup>	1560.889 14	(5/2,7/2 <sup>-</sup> )	2887.18 <sup>#</sup> 7	
777.3228 25	5/2 <sup>-</sup>	1589.534 13	5/2 <sup>+</sup>	2940.92 <sup>#</sup> 12	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
789.990 6	7/2 <sup>(+)</sup>	1652.78 <sup>#</sup> 9	5/2 <sup>+</sup>	3152.60 <sup>#</sup> 8	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
839.893 3	3/2 <sup>+</sup>	1673.37 8	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )	3182.31 <sup>#</sup> 9	
859.537 3	3/2 <sup>-</sup>	1802.03 <sup>#</sup> 8	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	3210.43 <sup>#</sup> 15	
895.274 3	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	1810.70 9	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	3333.09 <sup>#</sup> 23	3/2 <sup>+</sup> ,5/2 <sup>+</sup>
953.297 10	5/2 <sup>+</sup> ,7/2	1894.97 <sup>#</sup> 8		3340.10 <sup>#</sup> 25	
962.643 3	3/2 <sup>-</sup>	1943.34 <sup>#</sup> 10		3619.36 <sup>#</sup> 15	1/2 <sup>+</sup>
1003.846 6	5/2 <sup>+</sup>	1958.34 <sup>#</sup> 15		(8027.58 <sup>@</sup> 4)	1/2 <sup>+</sup> <sup>‡</sup>
1020.470 9	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	1986.03 <sup>#</sup> 8	1/2,3/2,5/2 <sup>+</sup>		

<sup>†</sup> See Adopted Levels.

<sup>‡</sup> For s-wave capture.

<sup>#</sup> Defined by a primary transition (1981En07,1984To11,1973Ak02).

<sup>@</sup> S(n)=8027.60 7 (2012Wa38).

<sup>74</sup>Se(n,γ) E=thermal:placed γ **1984To11,1982ToZS,1981En07 (continued)**

$\gamma(^{75}\text{Se})$									
$E_\gamma^\dagger$	$I_\gamma^a$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	$\delta^\ddagger$	$\alpha^\#$	Comments
83.6914 26 112.3880 12	0.012 4 6.0 5	747.6492 112.3875	7/2 <sup>-</sup> 7/2 <sup>+</sup>	663.9565 0.0	5/2 <sup>-</sup> 5/2 <sup>+</sup>	M1+E2	0.336 27	0.121 8	$\alpha(\text{K})=0.106$ 7; $\alpha(\text{L})=0.0127$ 9; $\alpha(\text{M})=0.00198$ 13; $\alpha(\text{N})=0.000160$ 10 <a href="#">Additional information 1.</a>
113.375 4 133.0405 29	0.026 7 0.089 13	777.3228 133.040	5/2 <sup>-</sup> 9/2 <sup>+</sup>	663.9565 0.0	5/2 <sup>-</sup> 5/2 <sup>+</sup>	E2		0.288	$\alpha(\text{K})=0.251$ 4; $\alpha(\text{L})=0.0318$ 5; $\alpha(\text{M})=0.00492$ 7; $\alpha(\text{N})=0.000385$ 6 $\alpha(\text{K})_{\text{exp}}=0.35$ 6.
141.3147 22	4.0 4	427.8849	5/2 <sup>-</sup>	286.5710	3/2 <sup>-</sup>	M1+E2	0.26 5	0.052 5	$\alpha(\text{K})=0.046$ 4; $\alpha(\text{L})=0.0052$ 6; $\alpha(\text{M})=0.00081$ 8; $\alpha(\text{N})=6.7\times 10^{-5}$ 7 <a href="#">Additional information 3.</a> $\alpha(\text{K})_{\text{exp}}=0.045$ 4, $\alpha(\text{L}1)_{\text{exp}}=0.0049$ 5.
161.561 10 175.973 9 191.3710 21 195.5812 24 211.4614 20	0.012 3 0.011 2 0.197 12 0.78 4 0.72 5	789.990 953.297 777.3228 859.537 839.893	7/2 <sup>(+)</sup> 5/2 <sup>+</sup> ,7/2 5/2 <sup>-</sup> 3/2 <sup>-</sup> 3/2 <sup>+</sup>	628.4308 777.3228 585.9507 663.9565 628.4308	5/2 <sup>+</sup> 5/2 <sup>-</sup> 3/2 <sup>-</sup> 5/2 <sup>-</sup> 5/2 <sup>+</sup>	M1		0.01403	$\alpha(\text{K})=0.01246$ 18; $\alpha(\text{L})=0.001338$ 19; $\alpha(\text{M})=0.000208$ 3; $\alpha(\text{N})=1.771\times 10^{-5}$ 25 $\alpha(\text{K})_{\text{exp}}=0.0120$ 11.
229.178 4	0.38 5	839.893	3/2 <sup>+</sup>	610.715	1/2 <sup>+</sup>	M1		0.01143	$\alpha(\text{K})=0.01016$ 15; $\alpha(\text{L})=0.001088$ 16; $\alpha(\text{M})=0.0001696$ 24; $\alpha(\text{N})=1.442\times 10^{-5}$ 21 $\alpha(\text{K})_{\text{exp}}=0.0109$ 27.
231.109 5 236.075 4	0.032 4 0.44 5	859.537 663.9565	3/2 <sup>-</sup> 5/2 <sup>-</sup>	628.4308 427.8849	5/2 <sup>+</sup> 5/2 <sup>-</sup>	M1(+E2)	0.32 17	0.012 3	$\alpha(\text{K})=0.0114$ 22; $\alpha(\text{L})=0.0012$ 3; $\alpha(\text{M})=0.00019$ 4; $\alpha(\text{N})=1.6\times 10^{-5}$ 4 <a href="#">Additional information 8.</a> $\alpha(\text{K})_{\text{exp}}=0.0114$ 21.
284.557 5 286.572 5	0.145 14 54 6	895.274 286.5710	1/2 <sup>-</sup> ,3/2 <sup>-</sup> 3/2 <sup>-</sup>	610.715 0.0	1/2 <sup>+</sup> 5/2 <sup>+</sup>	E1		0.00362 5	$\alpha=0.00362$ 5; $\alpha(\text{K})=0.00323$ 5; $\alpha(\text{L})=0.000337$ 5; $\alpha(\text{M})=5.24\times 10^{-5}$ 8; $\alpha(\text{N})=4.43\times 10^{-6}$ 7 <a href="#">Additional information 2.</a> $\alpha(\text{K})_{\text{exp}}=0.0034$ 4, $\alpha(\text{L}1)_{\text{exp}}=0.00033$ 4, $\alpha(\text{M})_{\text{exp}}=5.7\times 10^{-5}$ 12.
292.844 4	5.8 3	585.9507	3/2 <sup>-</sup>	293.105	1/2 <sup>-</sup>	M1		0.00620 9	$\alpha=0.00620$ 9; $\alpha(\text{K})=0.00552$ 8; $\alpha(\text{L})=0.000587$ 9; $\alpha(\text{M})=9.14\times 10^{-5}$ 13; $\alpha(\text{N})=7.79\times 10^{-6}$ 11 <a href="#">Additional information 5.</a> $\alpha(\text{K})_{\text{exp}}=0.0053$ 5.
298.6843 29 299.377 3	0.213 15 0.64 5	962.643 585.9507	3/2 <sup>-</sup> 3/2 <sup>-</sup>	663.9565 286.5710	5/2 <sup>-</sup> 3/2 <sup>-</sup>	M1		0.00587 9	$\alpha=0.00587$ 9; $\alpha(\text{K})=0.00522$ 8; $\alpha(\text{L})=0.000556$ 8; $\alpha(\text{M})=8.66\times 10^{-5}$ 13; $\alpha(\text{N})=7.37\times 10^{-6}$ 11 <a href="#">Additional information 6.</a> $\alpha(\text{K})_{\text{exp}}=0.0051$ 9.

<sup>74</sup>Se(n,γ) E=thermal:placed γ **1984To11,1982ToZS,1981En07** (continued)

<u>γ(<sup>75</sup>Se) (continued)</u>										
<u>E<sub>γ</sub><sup>†</sup></u>	<u>I<sub>γ</sub><sup>a</sup></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup>π</sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup>π</sup></u>	<u>Mult.<sup>‡</sup></u>	<u>δ<sup>‡</sup></u>	<u>α<sup>#</sup></u>	<u>Comments</u>	
309.323 3	0.183 14	895.274	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	585.9507	3/2 <sup>-</sup>					
315.498 5	0.53 4	427.8849	5/2 <sup>-</sup>	112.3875	7/2 <sup>+</sup>					
317.6101 28	0.614 29	610.715	1/2 <sup>+</sup>	293.105	1/2 <sup>-</sup>					
319.765 3	0.53 3	747.6492	7/2 <sup>-</sup>	427.8849	5/2 <sup>-</sup>	M1(+E2)	0.37 20	0.0058 9	α=0.0058 9; α(K)=0.0052 8; α(L)=0.00056 9; α(M)=8.7×10 <sup>-5</sup> 14; α(N)=7.3×10 <sup>-6</sup> 11	
324.134 12	0.015 2	610.715	1/2 <sup>+</sup>	286.5710	3/2 <sup>-</sup>					
324.650 4	0.154 9	1184.188	1/2,3/2,5/2	859.537	3/2 <sup>-</sup>					
326.1748 22	0.166 9	1073.825	5/2 <sup>-</sup>	747.6492	7/2 <sup>-</sup>					
334.215 5	0.053 4	962.643	3/2 <sup>-</sup>	628.4308	5/2 <sup>+</sup>					
341.862 4	0.090 6	628.4308	5/2 <sup>+</sup>	286.5710	3/2 <sup>-</sup>					
349.434 4	0.73 4	777.3228	5/2 <sup>-</sup>	427.8849	5/2 <sup>-</sup>					
370.852 15	0.010 3	663.9565	5/2 <sup>-</sup>	293.105	1/2 <sup>-</sup>					
375.418 6	0.032 5	1003.846	5/2 <sup>+</sup>	628.4308	5/2 <sup>+</sup>					
376.696 8	0.062 9	962.643	3/2 <sup>-</sup>	585.9507	3/2 <sup>-</sup>					
377.385 4	2.41 13	663.9565	5/2 <sup>-</sup>	286.5710	3/2 <sup>-</sup>	M1			<b>Additional information 9.</b> α(K)exp=0.0028 4.	
427.883 4	2.88 16	427.8849	5/2 <sup>-</sup>	0.0	5/2 <sup>+</sup>	E1		0.001230 18	α=0.001230 18; α(K)=0.001096 16; α(L)=0.0001142 16; α(M)=1.774×10 <sup>-5</sup> 25	
									<b>Additional information 4.</b> α(K)exp=0.00083 11.	
									α(K)exp=0.0021 3.	
431.652 4	1.90 9	859.537	3/2 <sup>-</sup>	427.8849	5/2 <sup>-</sup>	M1				
461.081 5	0.205 26	747.6492	7/2 <sup>-</sup>	286.5710	3/2 <sup>-</sup>					
467.389 6	0.075 16	895.274	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	427.8849	5/2 <sup>-</sup>					
484.212 5	0.58 3	777.3228	5/2 <sup>-</sup>	293.105	1/2 <sup>-</sup>	E2			α(K)exp=0.0037 8.	
487.873 5	0.175 17	1073.825	5/2 <sup>-</sup>	585.9507	3/2 <sup>-</sup>					
490.748 4	0.75 4	777.3228	5/2 <sup>-</sup>	286.5710	3/2 <sup>-</sup>					
495.390 5	0.227 17	628.4308	5/2 <sup>+</sup>	133.040	9/2 <sup>+</sup>					
516.042 5	2.8 3	628.4308	5/2 <sup>+</sup>	112.3875	7/2 <sup>+</sup>	M1(+E2)			<b>Additional information 7.</b> α(K)exp=0.0016 3.	
534.577 4	0.197 22	1198.535	5/2 <sup>+</sup>	663.9565	5/2 <sup>-</sup>					
534.758 7	0.25 4	962.643	3/2 <sup>-</sup>	427.8849	5/2 <sup>-</sup>					
551.568 6	0.167 14	663.9565	5/2 <sup>-</sup>	112.3875	7/2 <sup>+</sup>					
566.437 8	0.236 18	859.537	3/2 <sup>-</sup>	293.105	1/2 <sup>-</sup>					
572.968 12	1.14 13	859.537	3/2 <sup>-</sup>	286.5710	3/2 <sup>-</sup>				<b>Additional information 12.</b>	
585.944 6	0.368 28	585.9507	3/2 <sup>-</sup>	0.0	5/2 <sup>+</sup>					
598.246 9	0.37 3	1184.188	1/2,3/2,5/2	585.9507	3/2 <sup>-</sup>					
608.698 5	2.05 15	895.274	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	286.5710	3/2 <sup>-</sup>	(M1+E2)			α(K)exp=0.00096 267.	
610.712 6	6.0 4	610.715	1/2 <sup>+</sup>	0.0	5/2 <sup>+</sup>	(E2)			α(K)exp=0.00119 17.	
619.297 7	0.189 22	1047.185	5/2 <sup>-</sup> ,7/2 <sup>-</sup>	427.8849	5/2 <sup>-</sup>					
628.428 6	0.56 4	628.4308	5/2 <sup>+</sup>	0.0	5/2 <sup>+</sup>					
635.274 11	0.101 14	747.6492	7/2 <sup>-</sup>	112.3875	7/2 <sup>+</sup>					
645.925 10	0.197 14	1073.825	5/2 <sup>-</sup>	427.8849	5/2 <sup>-</sup>					
656.04 @ 14	0.026 7	789.990	7/2 <sup>(+)</sup>	133.040	9/2 <sup>+</sup>					

γ(<sup>75</sup>Se) (continued)

$E_\gamma^\dagger$	$I_\gamma^a$	$E_i(\text{level})$	$J_i^\pi$	$E_f$	$J_f^\pi$	Mult. <sup>‡</sup>	Comments
659.295 8	0.241 12	1245.244	3/2 <sup>-</sup>	585.9507	3/2 <sup>-</sup>		
663.98 6	0.034 3	663.9565	5/2 <sup>-</sup>	0.0	5/2 <sup>+</sup>		
669.535 11	0.205 11	962.643	3/2 <sup>-</sup>	293.105	1/2 <sup>-</sup>		
676.071 6	1.75 9	962.643	3/2 <sup>-</sup>	286.5710	3/2 <sup>-</sup>		
677.597 8	0.328 18	789.990	7/2 <sup>(+)</sup>	112.3875	7/2 <sup>+</sup>		Additional information 10.
684.27 6	0.020 2	1431.96		747.6492	7/2 <sup>-</sup>		
701.487@ 16	0.70 5	1560.889	(5/2,7/2 <sup>-</sup> )	859.537	3/2 <sup>-</sup>		
727.516 12	0.132 12	839.893	3/2 <sup>+</sup>	112.3875	7/2 <sup>+</sup>		
733.895 8	3.82 17	1020.470	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	286.5710	3/2 <sup>-</sup>	(M1)	Additional information 14. α(K)exp=0.00044 6.
747.63 3	0.056 11	747.6492	7/2 <sup>-</sup>	0.0	5/2 <sup>+</sup>		
760.63 3	0.055 7	1047.185	5/2 <sup>-</sup> ,7/2 <sup>-</sup>	286.5710	3/2 <sup>-</sup>		E <sub>γ</sub> : assigned by the evaluators on the basis of (p,n <sub>γ</sub> ) and (α,n <sub>γ</sub> ).
768.36 21	0.029 13	1431.96		663.9565	5/2 <sup>-</sup>		
770.644 9	0.82 5	1198.535	5/2 <sup>+</sup>	427.8849	5/2 <sup>-</sup>		
777.350 24	0.047 6	777.3228	5/2 <sup>-</sup>	0.0	5/2 <sup>+</sup>		
780.707 14	0.112 10	1073.825	5/2 <sup>-</sup>	293.105	1/2 <sup>-</sup>		
788.558 17	0.310 16	1374.513	1/2,3/2,5/2	585.9507	3/2 <sup>-</sup>		Additional information 16.
789.995 14	0.413 21	789.990	7/2 <sup>(+)</sup>	0.0	5/2 <sup>+</sup>		
819.9 5	0.021 7	953.297	5/2 <sup>+</sup> ,7/2	133.040	9/2 <sup>+</sup>		
839.882 11	3.66 18	839.893	3/2 <sup>+</sup>	0.0	5/2 <sup>+</sup>	M1	Additional information 11. α(K)exp=0.00043 6.
841.14 23	0.038 21	953.297	5/2 <sup>+</sup> ,7/2	112.3875	7/2 <sup>+</sup>		
859.472 24	0.149 10	859.537	3/2 <sup>-</sup>	0.0	5/2 <sup>+</sup>		
868.720 17	0.179 15	1454.676		585.9507	3/2 <sup>-</sup>		
870.89 8	0.044 11	1003.846	5/2 <sup>+</sup>	133.040	9/2 <sup>+</sup>		
873.818 17	0.292 16	1301.707	5/2,7/2	427.8849	5/2 <sup>-</sup>		
891.462 15	0.98 18	1003.846	5/2 <sup>+</sup>	112.3875	7/2 <sup>+</sup>		
897.603 11	1.06 5	1184.188	1/2,3/2,5/2	286.5710	3/2 <sup>-</sup>		
911.953 14	1.77 14	1198.535	5/2 <sup>+</sup>	286.5710	3/2 <sup>-</sup>		Additional information 15.
952.123 12	1.20 7	1245.244	3/2 <sup>-</sup>	293.105	1/2 <sup>-</sup>		
953.38 9	0.063 11	953.297	5/2 <sup>+</sup> ,7/2	0.0	5/2 <sup>+</sup>		
958.62 4	0.123 16	1245.244	3/2 <sup>-</sup>	286.5710	3/2 <sup>-</sup>		
961.439 20	0.56 5	1073.825	5/2 <sup>-</sup>	112.3875	7/2 <sup>+</sup>		
962.633 14	1.56 17	962.643	3/2 <sup>-</sup>	0.0	5/2 <sup>+</sup>		Additional information 13.
974.610@ 24	0.257 18	1560.889	(5/2,7/2 <sup>-</sup> )	585.9507	3/2 <sup>-</sup>		
978.813 12	1.73 11	1589.534	5/2 <sup>+</sup>	610.715	1/2 <sup>+</sup>		Additional information 17.
1003.806 14	0.88 5	1003.846	5/2 <sup>+</sup>	0.0	5/2 <sup>+</sup>		
1073.87 4	0.077 7	1073.825	5/2 <sup>-</sup>	0.0	5/2 <sup>+</sup>		
1144.449 18	2.52 15	1144.459	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	0.0	5/2 <sup>+</sup>		
1189.29 6	0.170 19	1301.707	5/2,7/2	112.3875	7/2 <sup>+</sup>		
1245.256 30	0.46 4	1245.244	3/2 <sup>-</sup>	0.0	5/2 <sup>+</sup>		
1380.25 8	0.41 3	1673.37	(1/2 <sup>-</sup> ,3/2 <sup>-</sup> )	293.105	1/2 <sup>-</sup>		
1448.74 10	0.188 19	1560.889	(5/2,7/2 <sup>-</sup> )	112.3875	7/2 <sup>+</sup>		

<sup>74</sup>Se(n, $\gamma$ ) E=thermal:placed  $\gamma$  1984To11,1982ToZS,1981En07 (continued)

$\gamma(^{75}\text{Se})$  (continued)

$E_\gamma$ †	$I_\gamma$ <sup>a</sup>	$E_i$ (level)	$J_i^\pi$	$E_f$	$J_f^\pi$	Comments
1560.74 15	0.131 14	1560.889	(5/2,7/2 <sup>-</sup> )	0.0	5/2 <sup>+</sup>	
1811.4 10	0.12 5	1810.70	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	0.0	5/2 <sup>+</sup>	
2270.6 & 6		2271.22		0.0	5/2 <sup>+</sup>	Additional information 18.
4408.08 14	0.365 28	(8027.58)	1/2 <sup>+</sup>	3619.36	1/2 <sup>+</sup>	
4687.32 24	0.34 4	(8027.58)	1/2 <sup>+</sup>	3340.10		
4694.33 22	0.34 4	(8027.58)	1/2 <sup>+</sup>	3333.09	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	
4816.99 14	0.165 12	(8027.58)	1/2 <sup>+</sup>	3210.43		
4845.10 8	0.69 4	(8027.58)	1/2 <sup>+</sup>	3182.31		
4874.81 7	0.79 4	(8027.58)	1/2 <sup>+</sup>	3152.60	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	
5086.48 11	0.356 24	(8027.58)	1/2 <sup>+</sup>	2940.92	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	
5140.21 6	0.575 28	(8027.58)	1/2 <sup>+</sup>	2887.18		
5245.30 9	0.392 20	(8027.58)	1/2 <sup>+</sup>	2782.08		
5289.97 7	0.62 3	(8027.58)	1/2 <sup>+</sup>	2737.41	1/2,3/2,5/2 <sup>+</sup>	
5395.56 8	0.509 26	(8027.58)	1/2 <sup>+</sup>	2631.81	1/2 <sup>+</sup>	
5429.59 8	0.406 23	(8027.58)	1/2 <sup>+</sup>	2597.78	1/2,3/2,5/2 <sup>+</sup>	
5461.98 5	0.83 4	(8027.58)	1/2 <sup>+</sup>	2565.39	1/2 <sup>+</sup>	
5570.93 5	1.21 6	(8027.58)	1/2 <sup>+</sup>	2456.43	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	
5756.12 15	0.124 7	(8027.58)	1/2 <sup>+</sup>	2271.22		
5785.25 15	0.103 6	(8027.58)	1/2 <sup>+</sup>	2242.09		
5860.64 9	0.465 23	(8027.58)	1/2 <sup>+</sup>	2166.69	1/2,3/2,5/2 <sup>+</sup>	
5996.96 11	0.252 14	(8027.58)	1/2 <sup>+</sup>	2030.36	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	
6041.29 7	0.352 9	(8027.58)	1/2 <sup>+</sup>	1986.03	1/2,3/2,5/2 <sup>+</sup>	
6068.98 14	0.127 7	(8027.58)	1/2 <sup>+</sup>	1958.34		
6083.98 9	0.447 22	(8027.58)	1/2 <sup>+</sup>	1943.34		
6132.34 7	0.389 19	(8027.58)	1/2 <sup>+</sup>	1894.97		
6216.61 8	0.450 23	(8027.58)	1/2 <sup>+</sup>	1810.70	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	
6225.27 7	1.27 6	(8027.58)	1/2 <sup>+</sup>	1802.03	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	
6374.51 8	0.235 27	(8027.58)	1/2 <sup>+</sup>	1652.78	5/2 <sup>+</sup>	
6437.80 7	2.73 14	(8027.58)	1/2 <sup>+</sup>	1589.534	5/2 <sup>+</sup>	Additional information 19.
6594.8 7	0.043 7	(8027.58)	1/2 <sup>+</sup>	1431.96		
6782.0 8	0.019 5	(8027.58)	1/2 <sup>+</sup>	1245.244	3/2 <sup>-</sup>	
6828.72 9	0.80 4	(8027.58)	1/2 <sup>+</sup>	1198.535	5/2 <sup>+</sup>	
6843.11 11	0.254 13	(8027.58)	1/2 <sup>+</sup>	1184.188	1/2,3/2,5/2	
6882.65 20	0.063 5	(8027.58)	1/2 <sup>+</sup>	1144.459	3/2 <sup>+</sup> ,5/2 <sup>+</sup>	
7006.74 11	1.38 7	(8027.58)	1/2 <sup>+</sup>	1020.470	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	
7064.64 11	0.78 4	(8027.58)	1/2 <sup>+</sup>	962.643	3/2 <sup>-</sup>	
7131.98 14	0.224 11	(8027.58)	1/2 <sup>+</sup>	895.274	1/2 <sup>-</sup> ,3/2 <sup>-</sup>	
7167.58 19	0.357 22	(8027.58)	1/2 <sup>+</sup>	859.537	3/2 <sup>-</sup>	
7187.5 5	0.037 22	(8027.58)	1/2 <sup>+</sup>	839.893	3/2 <sup>+</sup>	
7398.64 16	0.231 12	(8027.58)	1/2 <sup>+</sup>	628.4308	5/2 <sup>+</sup>	
7417 2	0.71 22	(8027.58)	1/2 <sup>+</sup>	610.715	1/2 <sup>+</sup>	
7441.24 16	0.502 25	(8027.58)	1/2 <sup>+</sup>	585.9507	3/2 <sup>-</sup>	
7734.12 28	25.0 13	(8027.58)	1/2 <sup>+</sup>	293.105	1/2 <sup>-</sup>	Additional information 20.

<sup>74</sup>Se(n, $\gamma$ ) E=thermal:placed  $\gamma$  1984To11,1982ToZS,1981En07 (continued)

$\gamma(^{75}\text{Se})$  (continued)

<u>E<math>\gamma</math><sup>†</sup></u>	<u>I<math>\gamma</math><sup>a</sup></u>	<u>E<sub>i</sub>(level)</u>	<u>J<sub>i</sub><sup><math>\pi</math></sup></u>	<u>E<sub>f</sub></u>	<u>J<sub>f</sub><sup><math>\pi</math></sup></u>	<u>Comments</u>
7740.6 11	0.91 29	(8027.58)	1/2 <sup>+</sup>	286.5710	3/2 <sup>-</sup>	
8027.2 3	0.070 4	(8027.58)	1/2 <sup>+</sup>	0.0	5/2 <sup>+</sup>	

<sup>†</sup> From 1982ToZS. For E $\gamma$ <2 MeV, a systematic uncertainty of (5 $\times$ 10<sup>-6</sup>)E $\gamma$  quoted by 1984To11 has been included by the evaluators for assigned gammas only.

<sup>‡</sup> From ce data (1984To11). I $\gamma$  and I(ce) scales were normalized to each other by assuming mult=E1 for the 287 $\gamma$  and 428 $\gamma$ .

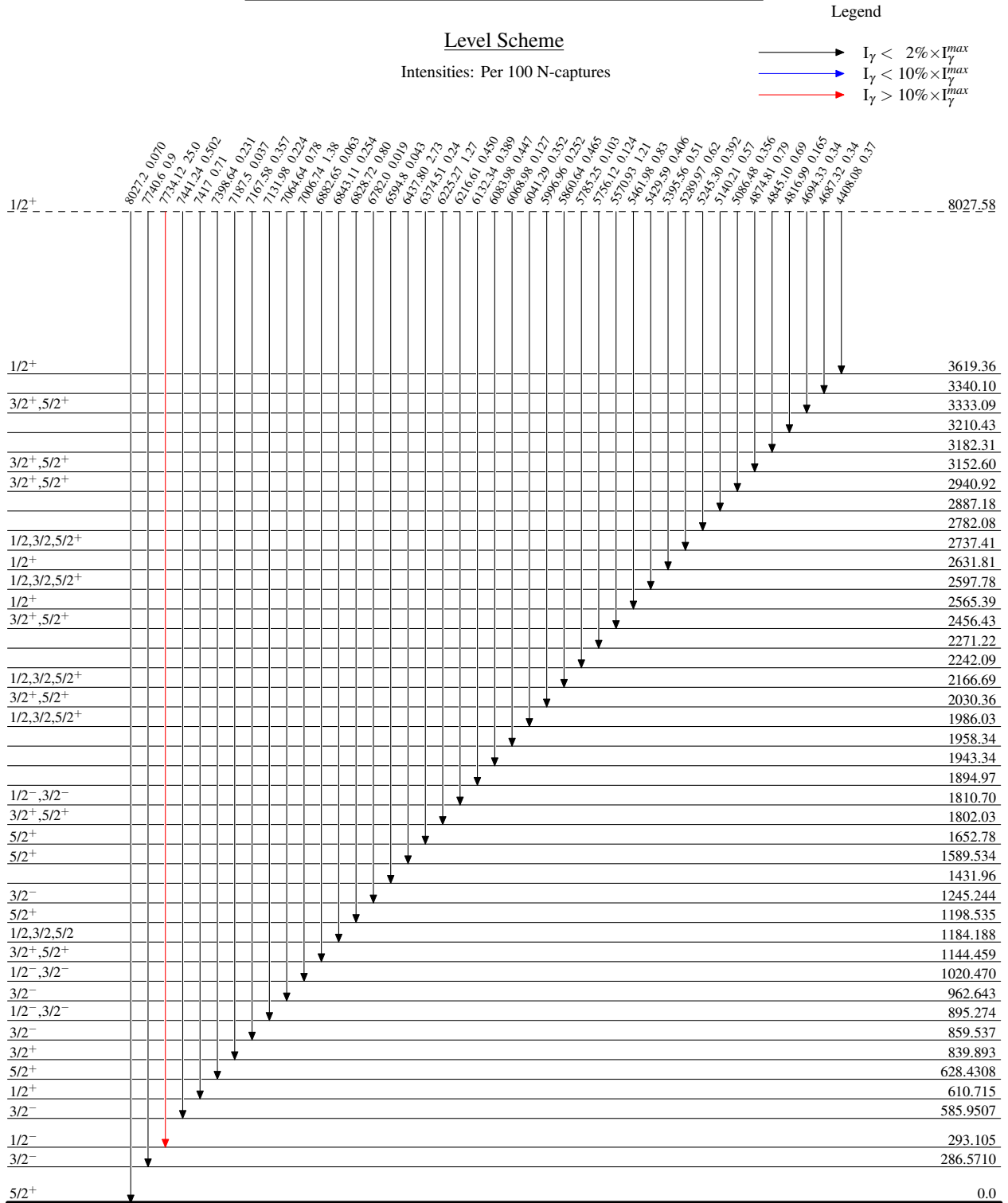
# Additional information 21.

@ Poor fit in the level scheme.

&  $\gamma$  From 2007ChZX.

<sup>a</sup> Intensity per 100 neutron captures.

<sup>74</sup>Se(n,γ) E=thermal:placed γ 1984To11,1982ToZS,1981En07



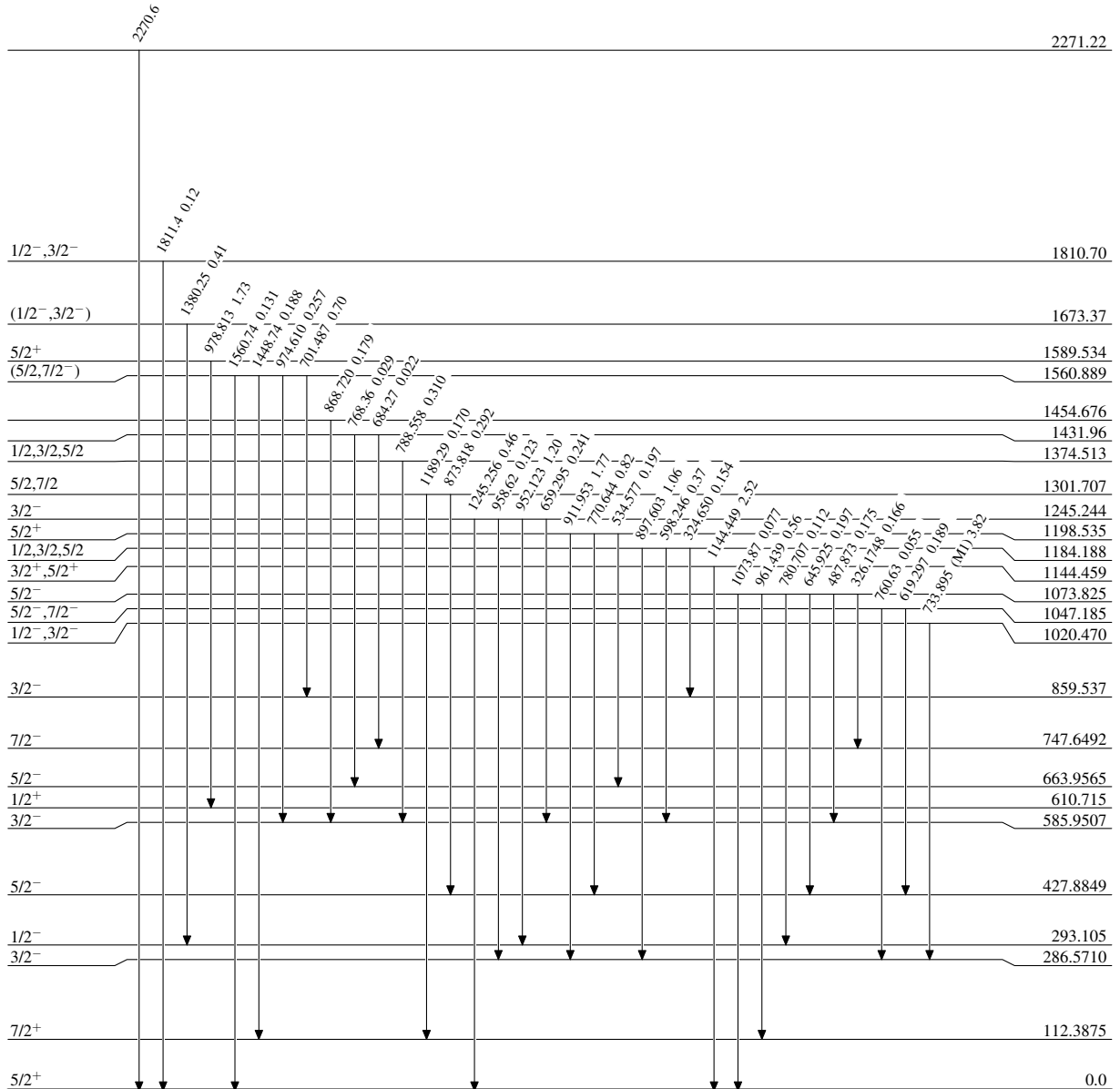
<sup>74</sup>Se(n,γ) E=thermal:placed γ 1984To11,1982ToZS,1981En07

Level Scheme (continued)

Intensities: Per 100 N-captures

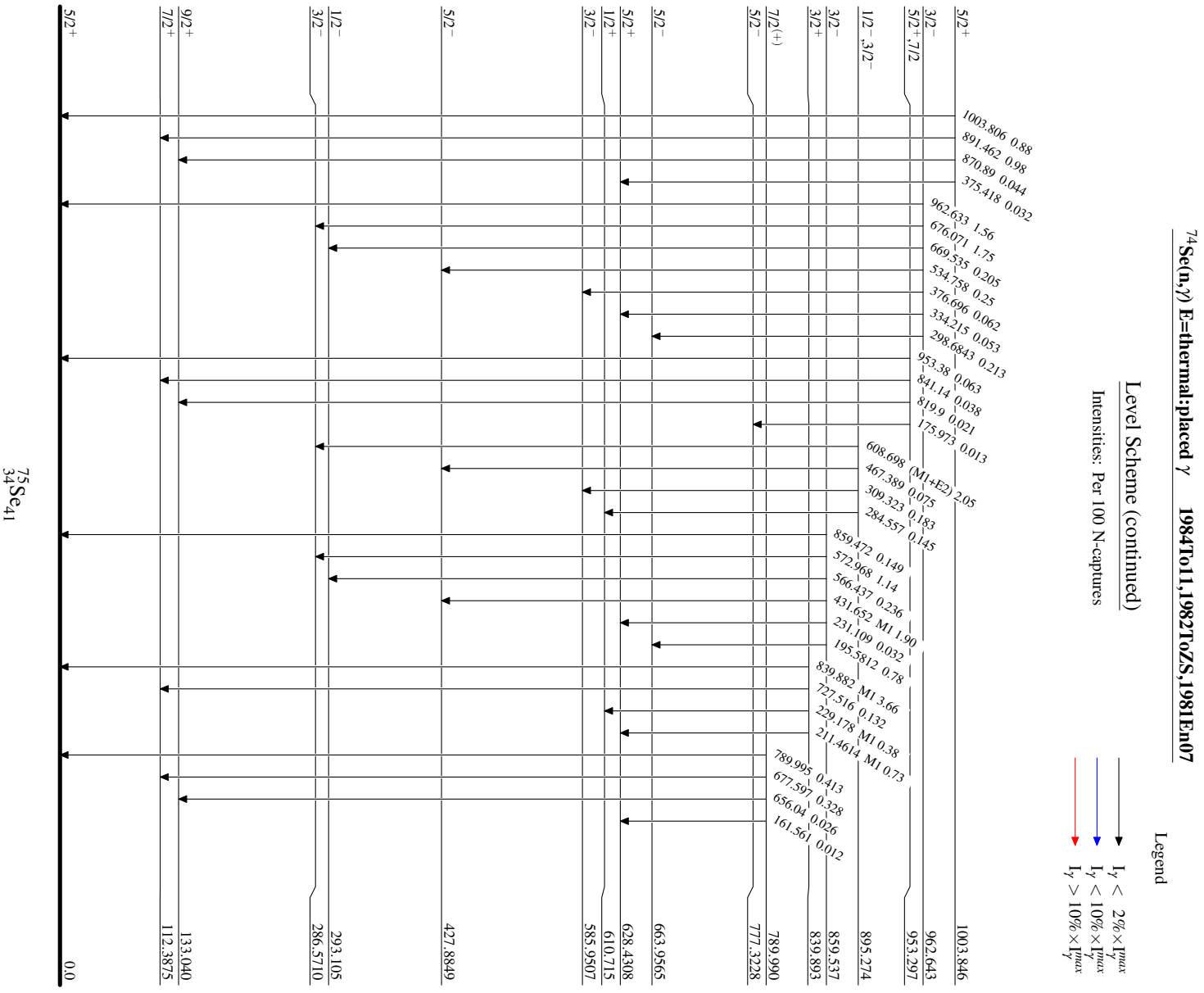
Legend

- ▶ I<sub>γ</sub> < 2% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> < 10% × I<sub>γ</sub><sup>max</sup>
- ▶ I<sub>γ</sub> > 10% × I<sub>γ</sub><sup>max</sup>



<sup>75</sup>Se<sub>41</sub>





<sup>74</sup>Se(n,γ)<sup>75</sup>Se thermal:placed γ 1984To11,1982ToZS,1981En07

