^{68}Zn(n,n′γ) 1974DiZY,1976SmZU,1985Ko27

History

Type	Author	Citation	Literature Cutoff Date
Full Evaluation	E. A. Mccutchan	NDS 113, 1735 (2012)	1-Mar-2012

1985Ko42: E(n)=reactor fast neutrons. Measured Eγ, γ(θ).
1985Ko27: E(n)=reactor fast neutrons. Measured Eγ, Iγ (Ge(Li) and NaI(Tl)), and $T_{1/2}$ with DSAM.
1976SmZU: Incident energy not given. Measured Eγ, Iγ(θ=90°,110°,124°,135°,146°).
1974DiZY: E(n)=5.4 MeV. Measured Eγ, Iγ(θ=55°) using Ge(Li).
Others: 1996Ko41,1985KoZL.

^{68}Zn Levels

E(level)†	Jπ‡	$T_{1/2}$#	E(level)†	Jπ‡	$T_{1/2}$#
0	0^+		3935.4 *3*	3^+	
1077.40 *4*	2^+		3989? *5*		
1655.95 *7*	0^+		4027.1 *3*	$(1^-,2^+)$	
1883.16 *6*	2^+		4061.0 *3*	(2^+)	62 fs *+21−17*
2338.43 *6*	2^+	0.24 ps *+11−6*	4102? *5*		
2417.36 *7*	4^+		4140.4 *3*	$1,2^+$	33 fs *+12−9*
2750.66 *7*	3^-	0.45 ps *+14−8*	4217 *4*	$1,2^+$	
2821.71 *11*	2^+	0.15 ps *3*	4229? *4*		
2959.2 *10*	(4^+)		4234? *4*	$(0,1,2)^-$	
3009.20 *11*	$(3)^+$	0.28 ps *+14−8*	4284 *3*	$(2,3)^+$	
3102.47 *11*	0^+		4325 *6*		
3153.5?@ *3*			4338 *6*	(1)	
3159.60 *22*			4409 *4*		
3164.4& *14*			4414 *6*	$1^+,2^+$	
3184.22 *9*	$1,2^+$	22 fs *6*	4440 *4*		
3281.32 *12*	4^+		4444 *6*		
3286.7 *3*	$1,2^+$	83 fs *+21−14*	4465 *6*	1^-	
3346.09 *20*	1^+	15 fs *+7−6*	4496 *6*	$(1,2^+)$	
3386? *3*			4504 *4*	(1)	
3400.9 *4*	$1,2^+$	45 fs *+17−14*	4520.0 *20*	$1,2^+$	
3425.06 *15*			4533 *5*	$1,2^+$	
3429.48 *21*	$(1,2^+)$		4578 *6*	$(1,2^+)$	
3451.0& *3*			4587 *4*	$1^+,2^+,3^+$	
3458.4 *17*	5^-		4608 *6*	(1^-)	
3496.12 *11*	$3^+,4^+$	62 fs *10*	4639.9 *24*	$1,2^+$	
3586.53 *9*	4^+		4670 *4*	$(1,2^+)$	
3624.35 *20*	$(1,2^+)$		4680 *6*		
3630.0 *5*	(2^+)		4718 *6*	$1^+,2^+$	
3666.0 *3*	$(1,2)^+$		4744? *5*	$2^-,3^-$	
3687.4 *4*	(6^+)		4792 *6*		
3709.8 *3*	(2^+)		4855 *6*	$1,2^+$	
3717.51 *19*	$1,2^+$		4872.9 *24*	$2^-,3^-,4^-$	
3726.58 *24*		33 fs *+9−6*	4910 *5*	$1,2^+$	
3776.0 *6*	$1,2^+$		4952		
3814.86 *20*	$1,2^+$	24 fs *+8−6*	4982 *6*		
3849.9 *5*	4^+	0.16 ps *+15−6*	4998 *6*	$1,2^+$	
3895.8 *5*	4^+		5148 *3*		
3911.4 *5*	$(2,3,4)^-$		5403 *5*	$1,2^+$	
3929? *4*					

† From least-squares fit to Eγ data.
‡ From the Adopted Levels.

Continued on next page (footnotes at end of table)

^{68}Zn(n,n′γ) 1974DiZY,1976SmZU,1985Ko27 (continued)

^{68}Zn Levels (continued)

From DSAM (1985Ko27).
@ Level observed only by 1976SmZU.
& γ′s used to construct the level are given alternate placements in (n,γ).

^{68}Zn(n,n′γ) 1974DiZY,1976SmZU,1985Ko27 (continued)

γ(^{68}Zn)

Placement of γ transitions closely follows the (n,γ) data of 1971Ot01 and is mainly based on the data of 1974DiZY.

E_γ †	σ(θ) mb/sr #	E_i(level)	J_i^π	E_f	J_f^π	Mult. ‡	δ ‡	Iγ @
x150.4 3								0.43 8
412.0 1	1.3 4	2750.66	3⁻	2338.43	2+			0.6 1
x418.0 11	0.20 12							
x443.0 11	0.24 12							
483.0 & 11	0.40 18	2821.71	2+	2338.43	2+			
x493.0 a 11	0.18 10							
x500.0 a 12	0.62 20							
542.0 a 12	0.21 11	2959.2	(4+)	2417.36	4+			
x570.0 ap 12	0.60 25							
578.55 5	4.5 9	1655.95	0+	1077.40	2+			8.68 12
622.0 13	0.40 15	3630.0	(2+)	3009.20	(3)+			
630.0 & 13	0.29 12	3451.0		2821.71	2+			
x634.0 13	0.11 7							
671.3 b 5	0.96 n 18	3009.20	(3)+	2338.43	2+			0.38 8
x735.0 14	0.25 11							
747.0 & 14	0.31 13	3164.4		2417.36	4+			
805.72 5	12.7 19	1883.16	2+	1077.40	2+	D+Q	−1.5 3	9.6 1
815.7 p 5		3153.5?		2338.43	2+			0.19 4
835.87 a 6	1.6 3	3586.53	4+	2750.66	3⁻			1.6 1
864.0 a 1	3.6 8	3281.32	4+	2417.36	4+			0.8 2
x874.0 16	0.7 4							
880.0 a 16	0.9 3	3630.0	(2+)	2750.66	3⁻			
x907.8 3								0.10 4
937.0 17	0.18 10	3895.8	4+	2959.2	(4+)			
x955.0 & 17	0.22 12							
x964.0 b 17	1.5 3							
x969.0 17	0.20 12							
978.0 &l 17	0.30 17	3726.58		2750.66	3⁻			
x1025.7 4	0.20 13							0.15 4
1041.0 c 17	4.1 10	3458.4	5⁻	2417.36	4+			
x1046.2 4								0.5 2
x1063.0 18	0.45 23							
1077.35 5	127 d	1077.40	2+	0	0+			100
x1102.3 3								0.12 3
1114.0 &bp 18	0.60 25	3451.0		2338.43	2+			
x1117.6 5								0.10 3
1126.0 1	5.3 8	3009.20	(3)+	1883.16	2+			2.63 7

$^{68}_{30}Zn_{38}$-3

^{68}Zn(n,n′γ) 1974DiZY,1976SmZU,1985Ko27 (continued)

γ(^{68}Zn) (continued)

E_γ[†]	σ(θ) mb/sr[#]	E_i(level)	J_i^π	E_f	J_f^π	Mult.[‡]	δ[‡]	Iγ[@]
[x]1159.5[&] *4*	0.54 *24*							0.12 *4*
[x]1171.3 *2*	0.81 *18*							0.28 *5*
1212.4 *4*	0.18 *11*	3630.0	(2$^+$)	2417.36	4$^+$			0.13 *4*
1219.3[&] *1*	0.70 *17*	3102.47	0$^+$	1883.16	2$^+$			0.59 *5*
1260.97 *5*	11.7 *18*	2338.43	2$^+$	1077.40	2$^+$	D+Q	−0.15 *2*	6.9 *1*
1270.0[&][p] *4*		3153.5?		1883.16	2$^+$			0.13 *2*
1270.0[&][p] *4*	0.5 *3*	3687.4	(6$^+$)	2417.36	4$^+$			
1275.9[&] *3*	0.5 *3*	4027.1	(1$^-$,2$^+$)	2750.66	3$^-$			0.19 *3*
[x]1285.3 *2*								0.15 *3*
1301.0[&] *2*	0.52 *18*	3184.22	1,2$^+$	1883.16	2$^+$			0.20 *4*
[x]1313.0 *21*	0.48 *17*							
1339.96 *5*	26 *4*	2417.36	4$^+$	1077.40	2$^+$			7.3 *1*
[x]1352.7 *5*								0.20 *5*
[x]1366.0[e] *22*	0.35 *22*							
1371.6 *3*	1.0 *3*	3709.8	(2$^+$)	2338.43	2$^+$			0.20 *5*
1387.0[&] *4*	0.66 *23*	3726.58		2338.43	2$^+$			0.19 *4*
1397.0[p] *5*	0.80 *21*	3281.32	4$^+$	1883.16	2$^+$			0.16 *5*
1432.5 *5*	1.4 *5*	3849.9	4$^+$	2417.36	4$^+$			0.3 *1*
1437.6[af] *6*	0.7 *4*	3776.0	1,2$^+$	2338.43	2$^+$			0.2 *1*
[x]1451.0[a] *5*	0.23 *11*							0.06 *3*
1462.0[cp] *23*	0.49 *18*	3346.09	1$^+$	1883.16	2$^+$			
1478.3 *5*	1.11 *20*	3895.8	4$^+$	2417.36	4$^+$			0.19 *7*
1493.0 *23*	0.35 *18*	3911.4	(2,3,4)$^-$	2417.36	4$^+$			
1517.7 *4*	0.80 *20*	3400.9	1,2$^+$	1883.16	2$^+$			0.24 *3*
1542.0[g] *2*	0.70 *25*	3425.06		1883.16	2$^+$			0.25 *4*
1546.3 *2*	1.6 *3*	3429.48	(1,2$^+$)	1883.16	2$^+$			0.42 *4*
1559.0[&][l] *24*	0.52 *22*	3895.8	4$^+$	2338.43	2$^+$			
1598.0 *25*	0.46 *22*	3935.4	3$^+$	2338.43	2$^+$			
[x]1608.0 *25*	0.20 *13*							
1612.3 *5*	0.20 *13*	3496.12	3$^+$,4$^+$	1883.16	2$^+$			0.10 *3*
[x]1617.0[e] *25*	0.20 *13*							
[x]1624.2[hp] *3*	2.3 *4*							0.38 *4*
1633.0[&] *25*	1.0 *4*	3286.7	1,2$^+$	1655.95	0$^+$			
1673.30 *6*	16.5 *25*	2750.66	3$^-$	1077.40	2$^+$			6.5 *1*
1697[p] *3*	0.35 *20*	4520.0	1,2$^+$	2821.71	2$^+$			
[x]1704.4 *5*								0.07 *3*
1724[&] *3*	1.8 *4*	4061.0	(2$^+$)	2338.43	2$^+$			0.13 *4*
1744.3 *1*	5.5 *8*	2821.71	2$^+$	1077.40	2$^+$	D+Q	0.15 *5*	1.6 *3*
[x]1778[e] *3*	1.03 *25*							
1780[e] *3*	1.03 *25*	3666.0	(1,2)$^+$	1883.16	2$^+$			

$^{68}_{30}Zn_{38}$-4

^{68}Zn(n,n′γ) 1974DiZY,1976SmZU,1985Ko27 (continued)

γ(^{68}Zn) (continued)

E_γ †	σ(θ) mb/sr#	E_i(level)	J_i^π	E_f	J_f^π	Mult.‡	δ‡	Iγ@	Comments
1883.1 *1*	26 *4*	1883.16	2^+	0	0^+			12.3 *2*	
x1926.4 *3*								0.11 *3*	
1932.0& *4*	0.9 *4*	3009.20	$(3)^+$	1077.40	2^+	D+Q	−0.15 *3*	0.36 *3*	
x1969& *3*	0.67 *22*								
2028.3 *5*	0.40 *18*	3911.4	$(2,3,4)^-$	1883.16	2^+			0.07 *3*	
x2054.3g *4*	0.75 *25*							0.11 *2*	
2061.5 *2*	0.78 *25*	3717.51	$1,2^+$	1655.95	0^+			0.13 *2*	
2082.7 *3*	0.44 *18*	3159.60		1077.40	2^+			0.11 *3*	
x2094e *3*	0.20 *14*								
2106.8a *1*	1.7 *6*	3184.22	$1,2^+$	1077.40	2^+			0.83 *3*	
2122ep *3*	0.26 *15*	4872.9	$2^-,3^-,4^-$	2750.66	3^-				
x2161 *3*	0.25 *13*								
2182 *3*	0.52 *22*	4520.0	$1,2^+$	2338.43	2^+				
2210.1i *4*	2.6 *14*	3286.7	$1,2^+$	1077.40	2^+			0.9 *1*	
x2259& *3*	0.62 *20*								
2270 *3*	0.62 *20*	3346.09	1^+	1077.40	2^+				
2300ep *3*	0.25 *20*	4639.9	$1,2^+$	2338.43	2^+				
2310gp *3*	0.6 *3*	3386?		1077.40	2^+				
2322&p *3*	0.9 *4*	3400.9	$1,2^+$	1077.40	2^+				
2339 *3*	0.35 *14*	2338.43	2^+	0	0^+				
2347.5g *2*	0.97 *19*	3425.06		1077.40	2^+			0.56 *3*	
2352 *3*	0.90 *18*	3429.48	$(1,2^+)$	1077.40	2^+				
2373.5&p *3*	0.63 *16*	3451.0		1077.40	2^+			0.15 *2*	
x2391.7 *4*	0.58 *16*							0.08 *2*	
2418.7& *1*	2.7 *4*	3496.12	$3^+,4^+$	1077.40	2^+			0.71 *3*	
x2428e *3*	0.25 *15*								
x2442 *3*	0.27 *10*								
x2470e *3*	0.15 *10*								
2508& *4*	0.73 *20*	3586.53	4^+	1077.40	2^+			0.08 *2*	
2546.9 *2*	0.86 *21*	3624.35	$(1,2^+)$	1077.40	2^+			0.34 *3*	
x2563& *4*	0.35 *18*								
2588.6& *3*	1.38 *23*	3666.0	$(1,2)^+$	1077.40	2^+			0.30 *3*	
2649.7& *3*	1.00 *22*	3726.58		1077.40	2^+			0.26 *3*	
2699& *4*	0.20 *14*	3776.0	$1,2^+$	1077.40	2^+				
2732jp *4*	1.7 *6*	5148		2417.36	4^+				σ(θ) mb/sr: deduced from total Iγ=3.2 *5* for doublet and branching of 3815 level in (n,γ).
2737.4 *2*	1.5 *4*	3814.86	$1,2^+$	1077.40	2^+			0.46 *4*	σ(θ) mb/sr: deduced from total Iγ=3.2 *5* for doublet and branching of 3815 level in (n,γ).

$^{68}_{30}Zn_{38}$-5

^{68}Zn(n,n′γ) 1974DiZY,1976SmZU,1985Ko27 (continued)

γ(^{68}Zn) (continued)

E_γ[†]	σ(θ) mb/sr[#]	E_i(level)	J_i^π	E_f	J_f^π	Iγ[@]	Comments
2821.5[o] 5	0.56[ok] 15	2821.71	2+	0	0+	0.05 2	
[x]2845[e] 4	0.5 3						
2852[gp] 4	1.0 3	3929?		1077.40	2+		
2857.9 3	1.6 3	3935.4	3+	1077.40	2+	0.27 3	
[x]2953 4	0.45 13						
2983.5 3	2.8 12	4061.0	(2+)	1077.40	2+	0.20 3	σ(θ) mb/sr: derived from Iγ data of 1976SmZU and σ(θ) for 1724γ. σ(θ)=2.4 5 for unresolved 2984γ and 2990γ.
2990[j] 4	<0.9	4872.9	2−,3−,4−	1883.16	2+		σ(θ) mb/sr: from σ(θ)=2.4 5 for unresolved 2984γ and 2990γ and deduced σ(θ) for 2984γ.
[x]3009[&] 4	1.3 3						
3062.9[amp] 3	0.76[m] 32	4140.4	1,2+	1077.40	2+	0.22 3	σ(θ) mb/sr: 1.05 44 for the unresolved 3062 and 3069 γ′s.
3065[lm] 4	0.29[m] 12	4952		1883.16	2+		σ(θ) mb/sr: 1.05 44 for the unresolved 3062 and 3069 γ′s.
3140[&] 4	0.81 14	4217	1,2+	1077.40	2+		
3152[gp] 4	0.35 18	4229?		1077.40	2+		
3157[p] 4	0.7 3	4234?	(0,1,2)−	1077.40	2+		
3184.2[g] 3	0.5 3	3184.22	1,2+	0	0+	0.22 3	
[x]3187 4	1.1 3						
3207[a] 4	0.13 9	4284	(2,3)+	1077.40	2+		
3285.8[e] 4	0.14 10	3286.7	1,2+	0	0+	0.22 3	
3332 4	0.15 7	4409		1077.40	2+		
3346.0 2	1.8 3	3346.09	1+	0	0+	0.47 4	
3360[p] 5	0.69 12	4440		1077.40	2+		
3383[ep] 5	0.18 10	3386?		0	0+		
3402[&] 5	0.22 11	3400.9	1,2+	0	0+		
3427[o&p] 5	0.12[o] 11	4504	(1)	1077.40	2+		σ(θ) mb/sr: deduced from total Iγ=0.31 14 for doublet and branching of 3429 level in (n,γ).
3430[oe] 5	0.19[o] 6	3429.48	(1,2+)	0	0+		σ(θ) mb/sr: deduced from total Iγ=0.31 14 for doublet and branching of 3429 level in (n,γ).
[x]3442 5	0.43 18						
3456[&] 5	0.46 21	4533	1,2+	1077.40	2+		
3511[&] 5	1.10 18	4587	1+,2+,3+	1077.40	2+		
3520[j] 5	<0.15	5403	1,2+	1883.16	2+		
3567[&] 5	0.67 12	4639.9	1,2+	1077.40	2+		
3592[p] 5	0.32 18	4670	(1,2+)	1077.40	2+		
3626 5	0.22 10	3624.35	(1,2+)	0	0+		
3666[o&] 5	0.37[o] 9	3666.0	(1,2)+	0	0+		σ(θ) mb/sr: deduced from total Iγ=1.22 19 for doublet and branching of 3666 level in (n,γ).
3666[o&p] 5	0.85[o] 19	4744?	2−,3−	1077.40	2+		σ(θ) mb/sr: deduced from total Iγ=1.22 19 for doublet and branching of 3666 level in (n,γ).

$^{68}_{30}Zn_{38}$-6

^{68}Zn(n,n′γ) 1974DiZY,1976SmZU,1985Ko27 (continued)

γ(^{68}Zn) (continued)

E_γ[†]	σ(θ) mb/sr[#]	E_i(level)	J_i^π	E_f	J_f^π	Iγ[@]	Comments
3708.2 *7*	0.80 *13*	3709.8	(2^+)	0	0^+	0.12 *3*	
3717.5 *4*	1.46 *21*	3717.51	$1,2^+$	0	0^+	0.22 *3*	
3773[&] *5*	0.8 *3*	3776.0	$1,2^+$	0	0^+		
3817 *5*	0.54 *14*	3814.86	$1,2^+$	0	0^+		
3832 *5*	0.60 *21*	4910	$1,2^+$	1077.40	2^+		
[x]3883 *5*	0.44 *15*						
[x]3909.5 *10*						0.10 *5*	
[x]3954 *5*	1.10 *19*						
3989[&p] *5*	0.30 *15*	3989?		0	0^+		
4028.3 *5*	1.14 *16*	4027.1	$(1^-,2^+)$	0	0^+	0.19 *3*	
4069[j] *5*	<0.1	5148		1077.40	2^+		
4102[p] *5*	0.67 *14*	4102?		0	0^+		
4282[ep] *6*	0.17 *17*	4284	$(2,3)^+$	0	0^+		
4325 *6*	0.39 *14*	4325		0	0^+		
4338[&] *6*	0.70 *15*	4338	(1)	0	0^+		
4414 *6*	0.54 *14*	4414	$1^+,2^+$	0	0^+		
4444[&m] *6*	0.46[m] *6*	4440		0	0^+		σ(θ) mb/sr: 0.98 *15* for the unresolved 4437.5 and 4448.7 γ′s.
4444[&m] *6*	0.58[m] *6*	4444		0	0^+		σ(θ) mb/sr: 0.98 *15* for the unresolved 4437.5 and 4448.7 γ′s.
4465 *6*	0.74 *11*	4465	1^-	0	0^+		
4496 *6*	0.30 *12*	4496	$(1,2^+)$	0	0^+		
4502 *6*	0.30 *12*	4504	(1)	0	0^+		
4523[e] *6*	0.17 *11*	4520.0	$1,2^+$	0	0^+		
4578 *6*	0.35 *10*	4578	$(1,2^+)$	0	0^+		
4585 *6*	0.31 *10*	4587	$1^+,2^+,3^+$	0	0^+		
4608 *6*	0.77 *13*	4608	(1^-)	0	0^+		
4639 *6*	0.28 *12*	4639.9	$1,2^+$	0	0^+		
4670[e] *6*	0.20 *13*	4670	$(1,2^+)$	0	0^+		
4680 *6*	0.52 *11*	4680		0	0^+		
4718 *6*	0.18 *9*	4718	$1^+,2^+$	0	0^+		
4792[&] *6*	0.45 *13*	4792		0	0^+		
4855 *6*	0.29 *10*	4855	$1,2^+$	0	0^+		
4982 *6*	0.23 *7*	4982		0	0^+		
4998 *6*	0.23 *8*	4998	$1,2^+$	0	0^+		

[†] Energies with uncertainty <1 keV and the 3909γ are from 1976SmZU; others are from 1974DiZY. Uncertainties on Eγ from 1974DiZY have been calculated from ΔE=0.5+0.0012Eγ.

[‡] From γ(θ) (1985Ko42).

$^{68}_{30}Zn_{38}$-7

^{68}Zn(n,n′γ) 1974DiZY,1976SmZU,1985Ko27 (continued)

γ(^{68}Zn) (continued)

[#] From 1974DiZY at θ=55° and E(n)=5.4 MeV.
[@] From 1976SmZU at θ=90°. Normalized to Iγ(1077γ)=100.
[&] Wide peak, probable multiplet.
[a] Coincident with background radiation.
[b] Coincident with known lines in copper.
[c] Coincident with known lines in germanium, due to interactions of neutrons with detector.
[d] Normalization for σ(mb/sr) 1974DiZY.
[e] Uncertain peak extraction due to unusual peak shape.
[f] Given as 1434.6 *6* by 1976SmZU depopulating 3776.3 keV state; most probably a misprint. A 1437.76 *24* γ from 3776 keV state is seen in (n,γ).
[g] Not clearly resolved from nearby strong peak.
[h] 1974DiZY observed a wide peak at 1626.0 *25* which they assign as a composite of the 1624.2 and 1627.7 γ′s observed in (n,γ). A 1624.2γ is tentatively placed as depopulating a 3281 level by 1976SmZU, however, this is inconsistent with the adopted J^{π}′s.
[i] Underlying broad peak believed associated with ^{1}H(n,γ) capture γ ray=2.22 MeV.
[j] Peak much larger for E(n)=5.9 MeV.
[k] 1974DiZY observed a wide peak at 2822 *4* which is assigned a composite of 2821.4γ and 2824.7γ, the latter for which they provide no placement in the level scheme.
[l] Placement from (n,γ). Unplaced in (n,n′γ).
[m] 1974DiZY observed a wide peak which they assign as a composite of two γ rays seen in (n,γ). The intensities given in the σ(θ) mb/sr column have been divided using the Iγ values from (n,γ). The undivided intensity for the composite peak is given in the comments.
[n] From adopted branching ratio relative to 1126γ, Iγ(671γ) is expected to be 0.25 *5*, suggesting only part of the measured Iγ(671γ) is associated with the 3009 level.
[o] Multiply placed with undivided intensity.
[p] Placement of transition in the level scheme is uncertain.
[x] γ ray not placed in level scheme.

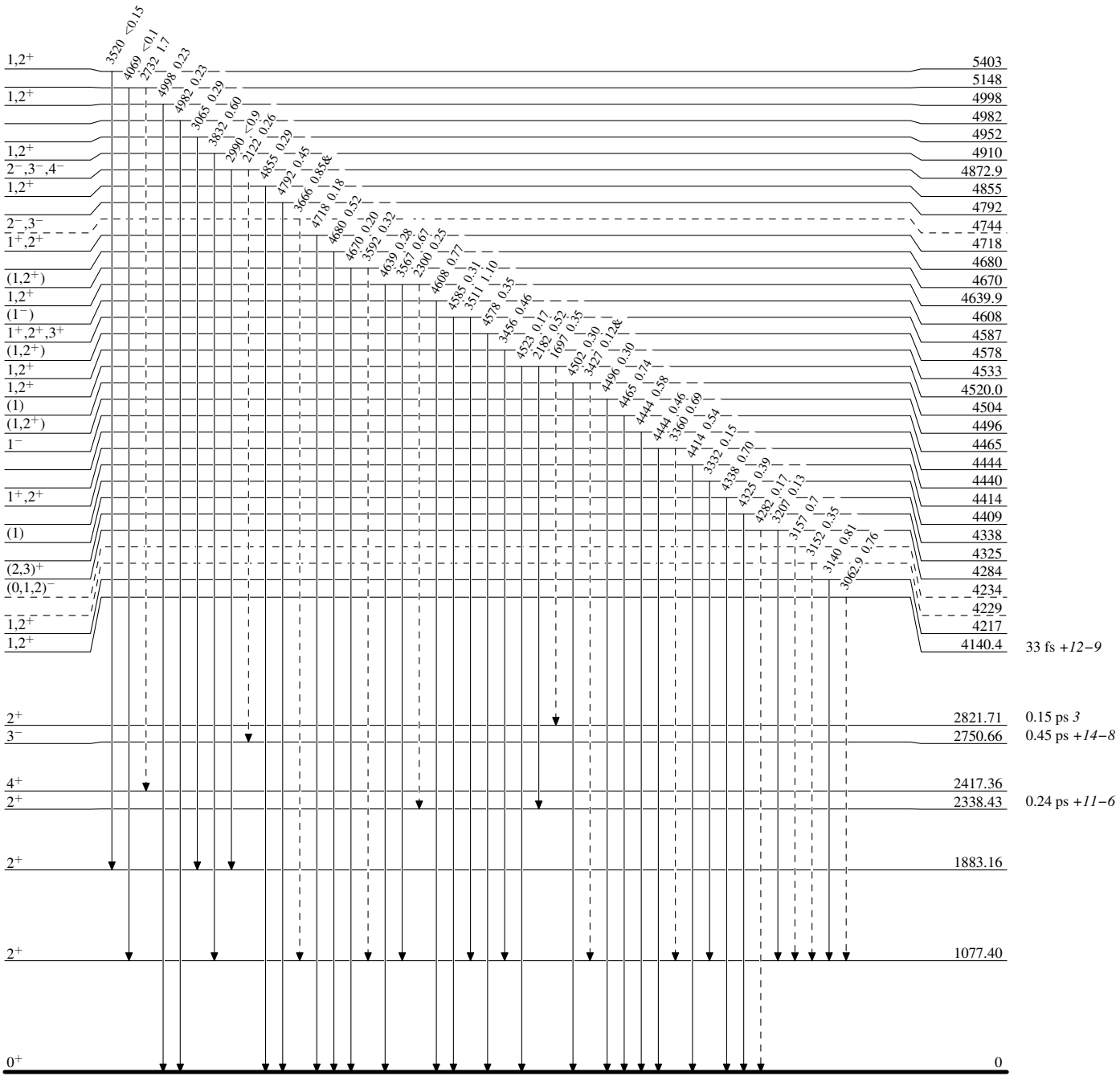
$^{68}_{30}Zn_{38}$-8

^{68}Zn(n,n′γ) 1974DiZY,1976SmZU,1985Ko27

Level Scheme

Intensities: Type not specified
& Multiply placed: undivided intensity given

Legend
- $I_\gamma < 2\% \times I_\gamma^{max}$
- $I_\gamma < 10\% \times I_\gamma^{max}$
- $I_\gamma > 10\% \times I_\gamma^{max}$
- γ Decay (Uncertain)



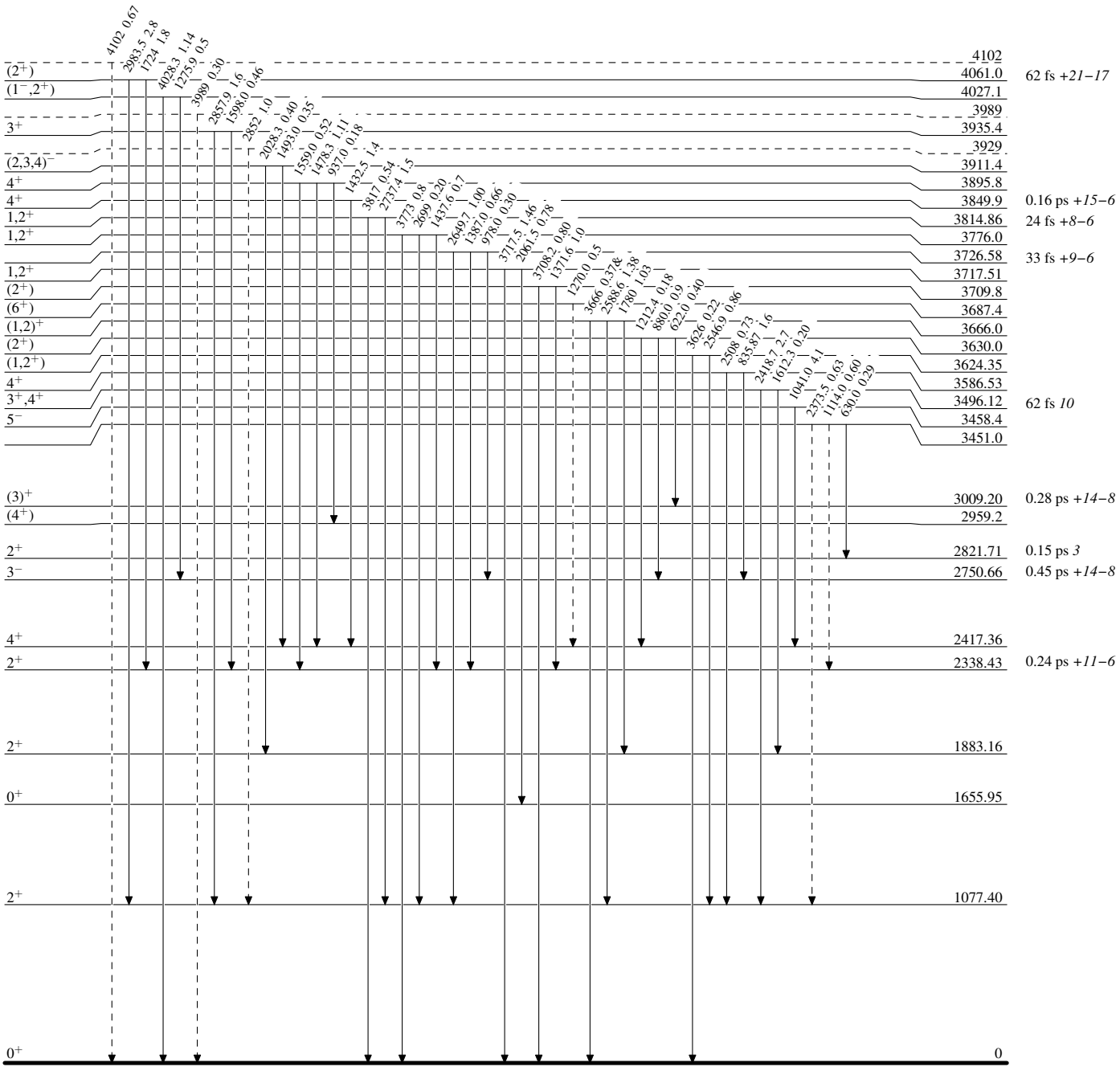
$^{68}_{30}Zn_{38}$

^{68}Zn(n,n′γ) 1974DiZY,1976SmZU,1985Ko27

Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given

Legend
$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
γ Decay (Uncertain)



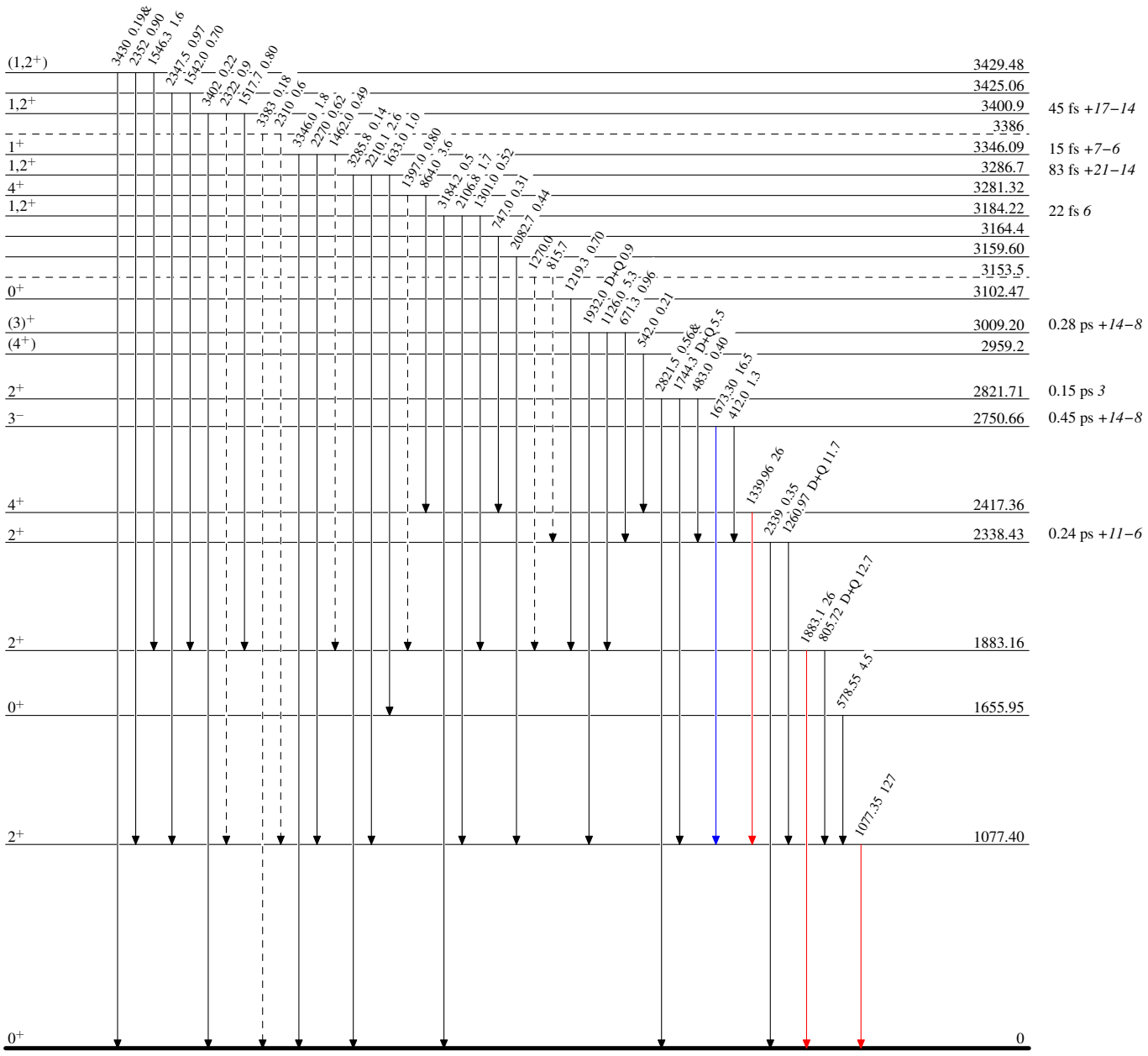
$^{68}_{30}Zn_{38}$

^{68}Zn(n,n′γ) 1974DiZY,1976SmZU,1985Ko27

Level Scheme (continued)

Intensities: Type not specified
& Multiply placed: undivided intensity given

Legend
$I_\gamma < 2\% \times I_\gamma^{max}$
$I_\gamma < 10\% \times I_\gamma^{max}$
$I_\gamma > 10\% \times I_\gamma^{max}$
γ Decay (Uncertain)



$^{68}_{30}Zn_{38}$