

$^{123}\text{Te}(\alpha, n\gamma)$ [1993Se01](#), [2000Ga08](#)

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	H. Iimura, J. Katakura, S. Ohya		NDS 180,1 (2022)	1-Oct-2021

[2000Ga08](#): E=15.5 MeV; γ , $\gamma\gamma$, $\gamma\gamma(\theta)$, t, DSAM.

[1993Se01](#): E=15-20 MeV; enriched target (89.4%, 1.6 mg/cm²); γ , $\gamma\gamma$, $\gamma(\theta)$, $\gamma(\text{pol})$, excit.

[1990Li13](#): Compton-suppressed Ge detector, $\gamma\gamma$, $\gamma(\theta)$, linear polarization. No I γ data were given, but B(E2) ratio given.

 ^{126}Xe Levels

E(level) [†]	J π [‡]	T _{1/2} ^a	Comments
0.0 ^b	0 ⁺		
388.61 ^b 7	2 ⁺		
879.84 ^e 7	2 ⁺		
941.91 ^b 8	4 ⁺		
1313.88 ^f 10	0 ⁺		
1317.61 ^d 8	3 ⁺		
1488.31 ^e 8	4 ⁺		
1634.88 ^b 9	6 ⁺		
1678.52 ^f 9	2 ⁺		
1760.5 ^{&} 5	0 ⁺ #		
1903.07 ^g 10	4 ⁺		
1903.35 ^d 9	5 ⁺		
2004.68 ^h 10	3 ⁽⁻⁾		
2042.09 ^f 10	4 ⁽⁺⁾		
2064.04 10	2 ⁽⁺⁾	≤0.29 ps	T _{1/2} : upper limit is given as 0.24 5 ps (2000Ga08).
2086.4 ^{&} 3	2 ⁺ #		
2214.22 ^e 10	6 ⁺		
2258.71 22	(4,5)		
2262.19 10	(3)	≤0.46 ps	T _{1/2} : upper limit is given as 0.37 9 ps (2000Ga08).
2301.38 ^j 10	5 ⁽⁻⁾		
2304.58 10	4 ⁽⁻⁾		
2305.64 13	(2,3)		
2314.87 12	(3 ⁻)		
2321.44 ⁱ 10	4 ⁽⁻⁾		
2350.52 10	(2,3)		
2358.82 25	1 ⁺ #	≤0.070 ps	J π : (2 ⁺) is reported (2000Ga08). T _{1/2} : upper limit is given as 0.49 21 ps (2000Ga08).
2362.98 ^g 10	5 ⁺		
2395.21 10	(3,4 ⁺)		
2414.19 ^h 10	5 ⁽⁻⁾		
2419.06 12	1 ⁺ , 2 ⁺ #		
2435.59 ^b 11	8 ⁺		
2489.53 12	(2 ⁺)	≤0.25 ps	T _{1/2} : upper limit is given as 0.21 4 ps (2000Ga08).
2492.50 11	(6 ⁺)		
2515.12 13	(3)		
2520.7 [@] 8	0 ⁺ , 1, 2 [#]		
2525.6 [@] 6			
2537.71 13	4		
2561.78 ^k 10	6 ⁻		
2565.5 5			J π : J=(3 ⁺) is reported from $\gamma\gamma(\theta)$ (2000Ga08). However, this assignment is not

Continued on next page (footnotes at end of table)

$^{123}\text{Te}(\alpha, n\gamma)$ [1993Se01,2000Ga08](#) (continued) ^{126}Xe Levels (continued)

E(level) [†]	J $\pi^{\ddagger}$	Comments
		consistent with $\varepsilon+\beta^+$ feeding from 1^+ .
2591.28 ^m 11	7 ⁻	
2594.6 [@] 10		
2598.49 12	5	
2603.8 [@] 10		
2608.76 11	(4,5)	
2622.81 11	5,6	
2631.7 [@] 8		
2632.3 [@] 10		
2642.4 [@] 6		
2661.31 ^d 12	7 ⁺	
2664.47 11	6 ⁽⁺⁾	
2677.72 ^j 11	7 ⁻	
2680.9 [@] 10		
2685.6 [@] 10		
2694.7 ^{&} 4		
2702.1 [@] 8		
2739.6 [@] 10		
2741.76 11	5 ⁽⁻⁾	
2753.43 ^{&} 20	3 ⁺ ,4,5 ⁺ [#]	
2756.8 [@] 10		
2758.19 ^l 13	8 ⁻	
2759.6 [@] 10		
2762.46 ⁱ 10	6 ⁻	
2765.5 5	(3 ⁺ ,5 ⁺)	
2779.8 ^{&} 4		
2788.00 12	(5 ⁺ ,6 ⁻)	
2789.8 [@] 5	(5)	
2797.6 [@] 10	0 ⁺ ,1,2 [#]	
2800.9 [@] 10		
2811.5 [@] 8		
2818.6 [@] 10		
2830.8 [@] 8		
2848.5 [@] 8		
2850.3 [@] 10		
2859.6 [@] 10		
2875.4 5	(5 ⁺ ,7 ⁺)	
2877.2 [@] 8		
2878.2 [@] 6		
2880.87 ^h 12	7 ⁻	
2884.6 [@] 8		
2884.7 [@] 8		
2885.4 [@] 10		
2897.9 [@] 10		
2907.5 [@] 8	3 ⁺ ,4,5 ⁺ [#]	

Continued on next page (footnotes at end of table)

$^{123}\text{Te}(\alpha, n\gamma)$ **1993Se01, 2000Ga08** (continued) ^{126}Xe Levels (continued)

E(level) [†]	J $\pi^{\ddagger}$	E(level) [†]	J $\pi^{\ddagger}$	E(level) [†]	J $\pi^{\ddagger}$	E(level) [†]	J $\pi^{\ddagger}$
2915.0 [@] 8		3049.5 [@] 8		3188.5 [@] 10		3359.70 ^b 15	10 ⁺
2928.9 [@] 10		3050.0 [@] 10		3194.6 [@] 10		3359.9 [@] 10	
2934.6 5	(5 ⁺ , 7 ⁺)	3051.4 [@] 8		3195.9 [@] 10		3369.3 [@] 10	
2941.4 [@] 5		3061.6 ^e 3	8 ⁺ #	3197.89 ⁱ 13	(8 ⁻)	3381.3 [@] 10	
2941.9 [@] 10		3064.36 ^m 13	9 ⁻	3217.4 [@] 10		3383.53 ⁿ 16	(9 ⁺)
2947.8 [@] 5		3072.9 [@] 10		3218.2 [@] 8		3386.8 ^{&} 4	
2952.22 12	(7, 8)	3075.6 [@] 10		3218.91 ^j 12	(9 ⁻)	3396.0 [@] 10	
2952.9 [@] 10		3084.7 ^{&} 4		3242.9 [@] 10		3446.33 ^l 16	10 ⁻ #
2961.9 [@] 10		3090.9 [@] 8		3252.0 [@] 8		3471.0 ^{&} 4	
2965.9 [@] 10		3093.99 ^k 17	(8 ⁻)	3270.9 [@] 10		3520.31 ^d 16	9 ⁺ #
2973.8 [@] 8	(4, 5, 6)#	3099.3 [@] 8		3286.6 [@] 10		3521.2 [@] 10	
2993.9 [@] 8		3105.9 [@] 10		3294.47 ^h 15	9 ⁻ #	3543.9 [@] 10	
2996.1 [@] 10		3116.91 ⁿ 14	(8 ⁺)	3297.9 [@] 10		3578.6 [@] 10	
2998.9 [@] 10		3123.4 [@] 10		3312.6 [@] 8		3591.8 ^{&} 5	
3001.6 [@] 10		3156.2 [@] 8		3313.2 ^{&} 4		3625.6 [@] 10	
3002.9 [@] 10		3157.3 [@] 10		3314.10 ^c 15	10 ⁺	3783.4 ^m 4	11 ⁻ #
3025.9 [@] 10		3170.2 [@] 10		3328.9 [@] 10			

[†] Based on a least-squares fit (by the evaluators) to the E γ 's.[‡] From $\gamma(\theta)$, $\gamma(\text{pol})$ in 1993Se01 and $\gamma\gamma(\theta)$ in 2000Ga08, unless where from Adopted Levels as noted.

From Adopted Levels.

@ Shown only in figures of the level scheme (1993Se01).

& From 2000Ga08. Shown only in figures of the level scheme.

^a From DSAM (2000Ga08).^b Band(A): band 2, ground-state band, (π, α)=(+, 0).^c Band(B): Band 3, (π, α)=(+, 0), based on configuration=(ν h_{11/2})².^d Band(C): band 4, (π, α)=(+, 1) quasi- γ band.^e Band(D): band 5, (π, α)=(+, 0) quasi- γ band.^f Band(E): band ⁶K=0⁺ band π =+.^g Band(F): band ⁷K=4⁺ band.^h Band(G): Band 8, (π, α)=(-, 1), signature partner of band 9, low K, based on $\nu(\text{h}_{11/2}+\text{g}_{7/2})$ or $\pi(\text{h}_{11/2}+\text{d}_{5/2})$.ⁱ Band(H): Band 9, (π, α)=(-, 0), signature partner of band 8, low K, based on $\nu(\text{h}_{11/2}+\text{g}_{7/2})$ or $\pi(\text{h}_{11/2}+\text{d}_{5/2})$.^j Band(I): Band 10, (π, α)=(-, 1), signature partner of band 11, low K, based on $\nu(\text{h}_{11/2}+\text{g}_{7/2})$ or $\pi(\text{h}_{11/2}+\text{d}_{5/2})$.^k Band(J): Band 11, (π, α)=(-, 0), signature partner of band 10, low K, based on $\nu(\text{h}_{11/2}+\text{g}_{7/2})$ or $\pi(\text{h}_{11/2}+\text{d}_{5/2})$.^l Band(K): Band 12, (π, α)=(-, 0), coupled band with band 13, high K, based on $\nu(\text{h}_{11/2}+\text{g}_{7/2})$.^m Band(L): Band 13, (π, α)=(-, 1), coupled band with band 12, high K, based on $\nu(\text{h}_{11/2}+\text{g}_{7/2})$.ⁿ Band(M): band 14, band member based on 3117-keV level.

¹²³Te($\alpha, n\gamma$) **1993Se01,2000Ga08** (continued)

$\gamma(^{126}\text{Xe})$									
E_γ †	I_γ †	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. &	δ &	α^a	Comments
166.8 1	0.51 1	2758.19	8 ⁻	2591.28	7 ⁻	D+Q	-3.9 +13-19		A ₂ =-0.39 3, A ₄ =+0.16 4 (1993Se01). δ : from 1993Se01.
184.5 3	0.08 1	2598.49	5	2414.19	5 ⁽⁻⁾				
185 ‡		2947.8		2762.46	6 ⁻				
207 ‡		2884.7		2677.72	7 ⁻				
210 ‡		3090.9		2880.87	7 ⁻				
226.2 2	0.056 8	2788.00	(5 ⁺ , 6 ⁻)	2561.78	6 ⁻				
231 ‡		2993.9		2762.46	6 ⁻				
233 ‡		3294.47	9 ⁻	3061.6	8 ⁺				
257.1 1	0.03 1	2561.78	6 ⁻	2304.58	4 ⁽⁻⁾				
260.4 1	0.20 1	2561.78	6 ⁻	2301.38	5 ⁽⁻⁾	D+Q	-0.5 +2-17		A ₂ =-0.84 7, A ₄ =+0.02 9 (1993Se01). δ : from 1993Se01.
266.6 1	0.03 1	3383.53	(9 ⁺)	3116.91	(8 ⁺)				
268.5 2	0.09 1	1903.35	5 ⁺	1634.88	6 ⁺	D+Q			A ₂ =-1.0 2, A ₄ =-0.2 2 (1993Se01). δ : +4 +5-1 or +0.2 1 (2000Ga08).
286 ‡		2884.6		2598.49	5				
289.9 2	0.07 1	2591.28	7 ⁻	2301.38	5 ⁽⁻⁾				
306.1 1	0.14 1	3064.36	9 ⁻	2758.19	8 ⁻	D+Q	-1.0 +6-8		A ₂ =-0.95 6, A ₄ =+0.15 8 (1993Se01). δ : from 1993Se01.
316.7 1	0.38 1	2321.44	4 ⁽⁻⁾	2004.68	3 ⁽⁻⁾				A ₂ =-0.47 4, A ₄ =+0.00 5 (1993Se01).
317.0 1		3197.89	(8 ⁻)	2880.87	7 ⁻				
322.5 2	0.09 1	2758.19	8 ⁻	2435.59	8 ⁺				
323 ‡		2884.7		2561.78	6 ⁻				
335.8 #		2694.7		2358.82	1 ⁺				
337 ‡		3218.2		2880.87	7 ⁻				
347 ‡		2884.6		2537.71	4				
348.3 2	0.16 1	2762.46	6 ⁻	2414.19	5 ⁽⁻⁾	(M1,E2)		0.0270 9	A ₂ =-0.67 9, A ₄ =-0.2 1; pol.=+0.3 2 (1993Se01).
358.2 #		2753.43	3 ⁺ , 4, 5 ⁺	2395.21	(3, 4 ⁺)				
360.8 1	0.14 1	1678.52	2 ⁺	1317.61	3 ⁺				
363.4 3	0.04 2	2042.09	4 ⁽⁺⁾	1678.52	2 ⁺	Q			A ₂ =+1.0 4, A ₄ =-0.8 5 (1993Se01).
364.6 2	0.51 2	1678.52	2 ⁺	1313.88	0 ⁺	E2			A ₂ =+0.0 4, A ₄ =+0.12 5; pol.=+0.6 2 (1993Se01).
372 ‡		3049.5		2677.72	7 ⁻				
375.7 1	1.56 2	1317.61	3 ⁺	941.91	4 ⁺	M1+E2			δ : +13 + ∞ -13 (1993Se01). +5.4 +10-8 or +0.11 3 (2000Ga08). A ₂ =-0.228 9, A ₄ =+0.02 1; pol.=+0.2 7 (1993Se01).
376 ‡		2789.8	(5)	2414.19	5 ⁽⁻⁾				
376.2 1		2677.72	7 ⁻	2301.38	5 ⁽⁻⁾				
377.1 1	0.23 1	2591.28	7 ⁻	2214.22	6 ⁺				A ₂ =-0.23 5, A ₄ =+0.04 7 (1993Se01).

$^{123}\text{Te}(\alpha, n\gamma)$ **1993Se01, 2000Ga08 (continued)** $\gamma(^{126}\text{Xe})$ (continued)

E_γ [†]	I_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. ^{&}	δ ^{&}	α^a	Comments
380 [‡]		2941.4		2561.78	6 ⁻				
382.0 <i>I</i>	0.04 <i>I</i>	3446.33	10 ⁻	3064.36	9 ⁻				$A_2 = -1.0$ 2, $A_4 = +0.3$ 3 (1993Se01).
388.6 <i>I</i>	100.0 2	388.61	2 ⁺	0.0	0 ⁺	E2		0.0187	$A_2 = +0.1409$ 6, $A_4 = -0.0211$ 9; pol. = +0.447 3 (1993Se01).
401.4 3	0.18 2	2304.58	4 ⁽⁻⁾	1903.07	4 ⁺				$A_2 = +0.26$ 7, $A_4 = +0.0$ 1 (1993Se01).
408.6 2	0.15 <i>I</i>	2622.81	5, 6	2214.22	6 ⁺				$A_2 = +0.30$ 9, $A_4 = -0.1$ 1 (1993Se01).
409.6 3	0.03 <i>I</i>	2414.19	5 ⁽⁻⁾	2004.68	3 ⁽⁻⁾				
413.6 <i>I</i>	0.14 2	3294.47	9 ⁻	2880.87	7 ⁻	(Q)			$A_2 = +0.4$ 1, $A_4 = -0.1$ 2 (1993Se01).
414.8 2	0.42 [@] <i>I</i> 2	1903.07	4 ⁺	1488.31	4 ⁺				
415.1 <i>I</i>	1.07 2	1903.35	5 ⁺	1488.31	4 ⁺	M1+E2			$A_2 = +0.06$ 2, $A_4 = +0.08$ 2; pol. = +0.3 2 (1993Se01).
									δ : +0.16 8 or +21 +52-13 (2000Ga08).
416.3 2	0.14 2	3093.99	(8 ⁻)	2677.72	7 ⁻				$A_2 = -0.4$ 1, $A_4 = +0.1$ 1 (1993Se01).
420.6 2	0.24 <i>I</i>	2741.76	5 ⁽⁻⁾	2321.44	4 ⁽⁻⁾	M1+E2	-0.9 +7-17	0.0161 <i>I</i> 1	$A_2 = -0.68$ 5, $A_4 = +0.05$ 6; pol. = +0.2 2 (1993Se01).
									δ : from 1993Se01 .
426 [‡]		3188.5		2762.46	6 ⁻				
434.0 <i>I</i>	0.24 <i>I</i>	1313.88	0 ⁺	879.84	2 ⁺	E2		0.0134	$A_2 = +0.06$ 7, $A_4 = +0.1$ 1; pol. = +0.5 1 (1993Se01).
435.5 2	0.22 <i>I</i>	3197.89	(8 ⁻)	2762.46	6 ⁻	(E2)		0.0133	$A_2 = +0.7$ 1, $A_4 = +0.0$ 1; pol. = +0.57 8 (1993Se01).
437.8 <i>I</i>	8.47 3	1317.61	3 ⁺	879.84	2 ⁺	M1+E2	+8 +3-2	0.0131	$A_2 = +0.093$ 3, $A_4 = +0.054$ 4; pol. = +0.33 1 (1993Se01).
									δ : from 2000Ga08 . Other: +21 +18-13 (1993Se01).
441.0 2	0.28 3	2762.46	6 ⁻	2321.44	4 ⁽⁻⁾	(E2)		0.0128	$A_2 = +0.37$ 6, $A_4 = -0.05$ 8; pol. = +0.26 2 (1993Se01).
447.4 3		2661.31	7 ⁺	2214.22	6 ⁺				
449 [‡]		2941.4		2492.50	(6 ⁺)				
456 [‡]		3218.2		2762.46	6 ⁻				
459.8 <i>I</i>	0.57 <i>I</i>	2362.98	5 ⁺	1903.35	5 ⁺	M1,E2		0.0126 <i>I</i> 3	$A_2 = -0.19$ 2, $A_4 = +0.01$ 3; pol. = +0.6 4 (1993Se01).
460.0 2		2362.98	5 ⁺	1903.07	4 ⁺				
461.1 2	0.21 <i>I</i>	2762.46	6 ⁻	2301.38	5 ⁽⁻⁾				
461.9 [#]		3084.7		2622.81	5, 6				
463.3 2	0.11 <i>I</i>	2677.72	7 ⁻	2214.22	6 ⁺				$A_2 = +0.3$ 1, $A_4 = +0.5$ 2 (1993Se01).
464 [‡]		2878.2		2414.19	5 ⁽⁻⁾				
466.7 3	0.04 2	2880.87	7 ⁻	2414.19	5 ⁽⁻⁾				
473.2 <i>I</i>	0.09 <i>I</i>	3064.36	9 ⁻	2591.28	7 ⁻	E2		0.0105	$A_2 = +0.4$ 1, $A_4 = +0.0$ 2; pol. = +0.7 4 (1993Se01).
481 [‡]		2973.8	(4, 5, 6)	2492.50	(6 ⁺)				
483.6 2	0.30 <i>I</i>	2788.00	(5 ⁺ , 6 ⁻)	2304.58	4 ⁽⁻⁾				$A_2 = -0.11$ 4, $A_4 = +0.01$ 5; pol. = +0.8 2 (1993Se01).
491.3 <i>I</i>	22.90 7	879.84	2 ⁺	388.61	2 ⁺	M1+E2	+8 3		$A_2 = -0.008$ 2, $A_4 = -0.003$ 2; pol. = +0.252 6 (1993Se01).
									δ : from 2000Ga08 . Other: 14 + ∞ -8 or -0.35 +7-13 or ≤ -16 (1993Se01).
496 [‡]		3157.3		2661.31	7 ⁺				
521 [‡]		2525.6		2004.68	3 ⁽⁻⁾				
527 [‡]		2848.5		2321.44	4 ⁽⁻⁾				

$^{123}\text{Te}(\alpha, n\gamma)$ **1993Se01, 2000Ga08** (continued) $\gamma(^{126}\text{Xe})$ (continued)

E_γ †	I_γ †	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. &	δ &	Comments
527 ‡		2941.4		2414.19	5 ⁽⁻⁾			
530.2 #		3591.8		3061.6	8 ⁺			
532.2 2	0.19 1	3093.99	(8 ⁻)	2561.78	6 ⁻	(Q)		$A_2=+0.34$ 6, $A_4=-0.21$ 9 (1993Se01).
534 ‡		2947.8		2414.19	5 ⁽⁻⁾			
536.8 2		3197.89	(8 ⁻)	2661.31	7 ⁺			
541.1 1	0.11 1	3218.91	(9 ⁻)	2677.72	7 ⁻	(E2)		$A_2=+0.42$ 6, $A_4=-0.04$ 8; pol.=+0.7 2 (1993Se01).
546.4 1	3.74 2	1488.31	4 ⁺	941.91	4 ⁺	M1+E2	+3.0 +10-9	$A_2=-0.018$ 4, $A_4=-0.064$ 6; pol.=+0.22 2 (1993Se01). δ : from 2000Ga08 . Other: +3.5 +9-6 (1993Se01).
553.4 1	47.90 3	941.91	4 ⁺	388.61	2 ⁺	E2		$A_2=+0.242$ 1, $A_4=-0.042$ 1; pol.=+0.634 4 (1993Se01).
574 ‡		3252.0		2677.72	7 ⁻			
579.3 1	0.70 1	2214.22	6 ⁺	1634.88	6 ⁺	M1+E2	+0.7 2	$A_2=+0.23$ 2, $A_4=-0.06$ 3; pol.=+0.5 1 (1993Se01). δ : from 2000Ga08 . Other: +0.92 +34-50 or -0.27 +36-4 (1993Se01).
585.3 2	0.9 @ 3	1903.07	4 ⁺	1317.61	3 ⁺			
585.8 2	6.49 4	1903.35	5 ⁺	1317.61	3 ⁺	E2		$A_2=+0.263$ 4, $A_4=-0.032$ 5; pol.=+0.58 2 (1993Se01).
600 ‡		2915.0		2314.87	(3 ⁻)			
608.5 1	7.44 4	1488.31	4 ⁺	879.84	2 ⁺	E2		$A_2=+0.230$ 3, $A_4=-0.027$ 4; pol.=+0.60 2 (1993Se01).
616 ‡		3051.4		2435.59	8 ⁺			
617 ‡		2830.8		2214.22	6 ⁺			
622.5 2	0.25 1	2664.47	6 ⁽⁺⁾	2042.09	4 ⁽⁺⁾	(E2)		$A_2=+0.26$ 5, $A_4=-0.04$ 6; pol.=+0.1 2 (1993Se01).
640 ‡		2941.4		2301.38	5 ⁽⁻⁾			
647 ‡		2947.8		2301.38	5 ⁽⁻⁾			
651 ‡		2965.9		2314.87	(3 ⁻)			
658.5 1	1.05 1	2561.78	6 ⁻	1903.35	5 ⁺	E1		$A_2=-0.25$ 1, $A_4=-0.01$ 2; pol.=+0.52 6 (1993Se01).
661 ‡		3252.0		2591.28	7 ⁻			
666.3 2	0.66 3	2301.38	5 ⁽⁻⁾	1634.88	6 ⁺	(E1)		$A_2=+0.16$ 4, $A_4=-0.13$ 6; pol.=+0.3 2 (1993Se01).
667.2 2	1.89 9	2880.87	7 ⁻	2214.22	6 ⁺			
681.3 1	0.21 2	3116.91	(8 ⁺)	2435.59	8 ⁺	(M1,E2)		$A_2=+0.24$ 6, $A_4=+0.04$ 9; pol.=+0.7 1 (1993Se01).
687 ‡		3050.0		2362.98	5 ⁺			
688.0 2	0.15 1	3446.33	10 ⁻	2758.19	8 ⁻			
693.0 1	18.10 7	1634.88	6 ⁺	941.91	4 ⁺	E2		$A_2=+0.277$ 2, $A_4=-0.049$ 3; pol.=+0.717 8 (1993Se01).
704.4 #		3313.2		2608.76	(4,5)			
705.4 1	0.27 3	2608.76	(4,5)	1903.35	5 ⁺			$A_2=+0.18$ 8, $A_4=+0.3$ 1; pol.=+0.2 5 (1993Se01).
708 ‡		3369.3		2661.31	7 ⁺			
715.8 #		2779.8		2064.04	2 ⁽⁺⁾			
719.0 3		3783.4	11 ⁻	3064.36	9 ⁻			
719.4 2		2622.81	5,6	1903.35	5 ⁺			
719.5 2	0.11 2	2622.81	5,6	1903.07	4 ⁺			$A_2=+0.28$ 8, $A_4=+0.1$ 1; pol.=+0.8 4 (1993Se01).

$^{123}\text{Te}(\alpha, n\gamma)$ **1993Se01, 2000Ga08 (continued)** $\gamma(^{126}\text{Xe})$ (continued)

E_γ †	I_γ †	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. &	Comments
721 ‡		3156.2		2435.59	8 ⁺		
722 ‡		3312.6		2591.28	7 ⁻		
722.3 2	0.18 4	3383.53	(9 ⁺)	2661.31	7 ⁺	(E2)	$A_2=-0.23$ 5, $A_4=-0.01$ 7; pol.=+0.5 3 (1993Se01).
722.3 #		3386.8		2664.47	6 ⁽⁺⁾		
725.9 1	2.51 3	2214.22	6 ⁺	1488.31	4 ⁺	E2	$A_2=+0.277$ 8, $A_4=-0.06$ 1; pol.=+0.7 6 (1993Se01).
727 ‡		2941.4		2214.22	6 ⁺		
727.7 2	0.32 1	2362.98	5 ⁺	1634.88	6 ⁺	M1,E2	$A_2=-0.2$ 1, $A_4=+0.3$ 2; pol.=+0.1 2 (1993Se01).
736.5 4	0.20 3	1678.52	2 ⁺	941.91	4 ⁺	E2	$A_2=-0.1$ 1, $A_4=+0.0$ 2; pol.=+0.6 4 (1993Se01).
737.0 3		2741.76	5 ⁽⁻⁾	2004.68	3 ⁽⁻⁾		
737.7 1	0.37 3	2952.22	(7,8)	2214.22	6 ⁺		$A_2=+0.33$ 5, $A_4=-0.08$ 6; pol.=+0.6 8 (1993Se01).
748 ‡		3049.5		2301.38	5 ⁽⁻⁾		
756 ‡		3170.2		2414.19	5 ⁽⁻⁾		
758.0 1	1.41 2	2661.31	7 ⁺	1903.35	5 ⁺	E2	$A_2=+0.28$ 1, $A_4=-0.07$ 2; pol.=+0.74 7 (1993Se01).
762.1 2	0.09 1	3197.89	(8 ⁻)	2435.59	8 ⁺		
763 ‡		3521.2		2758.19	8 ⁻		
770.4 2	0.08 1	2258.71	(4,5)	1488.31	4 ⁺		$A_2=-0.6$ 4, $A_4=-1.0$ 5; pol.=+1.0 5 (1993Se01).
771 ‡		3075.6		2304.58	4 ⁽⁻⁾		
779.2 2	0.12 9	2414.19	5 ⁽⁻⁾	1634.88	6 ⁺	(E1)	$A_2=-0.1$ 1, $A_4=-0.2$ 1; pol.=+0.7 3 (1993Se01).
783.4 1	0.145 9	3218.91	(9 ⁻)	2435.59	8 ⁺	(E1)	$A_2=-0.35$ 7, $A_4=-0.1$ 1; pol.=+0.5 2 (1993Se01).
790 ‡		3381.3		2591.28	7 ⁻		
795 ‡		3099.3		2304.58	4 ⁽⁻⁾		
798.8 1	0.86 2	1678.52	2 ⁺	879.84	2 ⁺	M1,E2	$A_2=+0.27$ 3, $A_4=-0.04$ 3; pol.=+0.8 1 (1993Se01).
800.7 1	2.56 2	2435.59	8 ⁺	1634.88	6 ⁺	E2	$A_2=+0.287$ 7, $A_4=-0.077$ 9; pol.=+0.78 4 (1993Se01).
802 ‡		3123.4		2321.44	4 ⁽⁻⁾		
806.5 #		3471.0		2664.47	6 ⁽⁺⁾		
813.0 3	0.07 1	2301.38	5 ⁽⁻⁾	1488.31	4 ⁺		
816.2 1	0.34 1	2304.58	4 ⁽⁻⁾	1488.31	4 ⁺	(E1)	$A_2=+0.16$ 4, $A_4=-0.04$ 6; pol.=+0.5 3 (1993Se01).
837 ‡		3051.4		2214.22	6 ⁺		
847 ‡		2525.6		1678.52	2 ⁺		
847.4 #		3061.6	8 ⁺	2214.22	6 ⁺		
850.0 #		2753.43	3 ⁺ , 4, 5 ⁺	1903.35	5 ⁺		
851 ‡		3286.6		2435.59	8 ⁺		
857.7 1	0.95 2	2492.50	(6 ⁺)	1634.88	6 ⁺	(M1,E2)	$A_2=+0.18$ 2, $A_4=+0.02$ 3; pol.=+0.7 1 (1993Se01).
859.0 1		3520.31	9 ⁺	2661.31	7 ⁺		
859.1 1	0.45 2	2762.46	6 ⁻	1903.35	5 ⁺	(E1)	$A_2=-0.11$ 4, $A_4=-0.02$ 6; pol.=+0.9 3 (1993Se01).
874.5 2	0.29 1	2362.98	5 ⁺	1488.31	4 ⁺	M1+E2	$A_2=+0.5$ 1, $A_4=+0.1$ 1; pol.=+0.5 2 (1993Se01). δ : +0.5 1 or +1.8 5 (2000Ga08).

$^{123}\text{Te}(\alpha, n\gamma)$ **1993Se01,2000Ga08 (continued)** $\gamma(^{126}\text{Xe})$ (continued)

E_γ †	I_γ †	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. &	δ &	Comments
878.5 <i>I</i>	0.24 4	3314.10	10 ⁺	2435.59	8 ⁺	E2		$A_2=+0.26$ 5, $A_4=-0.12$ 7; pol.=+0.9 <i>I</i> (1993Se01).
879.9 <i>I</i>	5.78 5	879.84	2 ⁺	0.0	0 ⁺	E2		$A_2=+0.122$ 4, $A_4=+0.003$ 6; pol.=+0.57 2 (1993Se01).
884.6 <i>I</i>	0.28 <i>I</i>	2788.00	(5 ⁺ ,6 ⁻)	1903.35	5 ⁺			$A_2=-0.26$ 5, $A_4=-0.28$ 7; pol.=+0.6 <i>I</i> (1993Se01).
906.8 <i>I</i>	0.20 2	2395.21	(3,4 ⁺)	1488.31	4 ⁺			$A_2=+0.28$ 7, $A_4=-0.1$ <i>I</i> ; pol.=+0.5 4 (1993Se01).
908 ‡		2811.5		1903.35	5 ⁺			
916 ‡		3217.4		2301.38	5 ⁽⁻⁾			
924.1 <i>I</i>	0.11 <i>I</i>	3359.70	10 ⁺	2435.59	8 ⁺	E2		$A_2=+0.6$ <i>I</i> , $A_4=-0.5$ <i>I</i> ; pol.=+0.9 3 (1993Se01).
925.3 <i>I</i>	0.83 5	1313.88	0 ⁺	388.61	2 ⁺	E2		$A_2=-0.08$ 2, $A_4=-0.04$ 3; pol.=+0.6 <i>I</i> (1993Se01).
926.1 <i>I</i>	0.45 5	2414.19	5 ⁽⁻⁾	1488.31	4 ⁺	(E1)		$A_2=+0.28$ 9, $A_4=-0.2$ <i>I</i> ; pol.=+0.6 <i>I</i> (1993Se01).
929.0 <i>I</i>	8.05 5	1317.61	3 ⁺	388.61	2 ⁺	M1+E2	+1.9 2	$A_2=+0.331$ 3, $A_4=+0.045$ 5; pol.=+0.31 2 (1993Se01). δ : from 2000Ga08. Other: +2.3 +13-18 (1993Se01).
944.8 <i>I</i>	0.67 2	2262.19	(3)	1317.61	3 ⁺	D+Q		$A_2=+0.2$ 3, $A_4=-0.09$ 5; pol.=+0.6 2 (1993Se01). δ : -0.04 20 or +0.00 8 (2000Ga08).
956.4 <i>I</i>	1.87 2	2591.28	7 ⁻	1634.88	6 ⁺	E1		$A_2=-0.222$ 8, $A_4=+0.02$ <i>I</i> ; pol.=+0.61 5 (1993Se01).
961.2 2	1.4 @ 4	1903.07	4 ⁺	941.91	4 ⁺			
961.6 <i>I</i>	2.91 3	1903.35	5 ⁺	941.91	4 ⁺	M1+E2	+0.8 3	$A_2=+0.38$ 2, $A_4=+0.10$ 3; pol.=+0.28 5 (1993Se01). δ : from 2000Ga08.
973.9 <i>I</i>	0.28 <i>I</i>	2608.76	(4,5)	1634.88	6 ⁺			
975 ‡		2878.2		1903.35	5 ⁺			
982 ‡		2885.4		1903.35	5 ⁺			
987.0 <i>I</i>	1.35 5	2304.58	4 ⁽⁻⁾	1317.61	3 ⁺	(E1)		$A_2=-0.10$ 2, $A_4=-0.02$ 3; pol.=+0.7 5 (1993Se01).
988.0 <i>I</i>	0.68 5	2622.81	5,6	1634.88	6 ⁺			$A_2=+0.24$ 4, $A_4=+0.08$ 6 (1993Se01).
1003.9 2	0.65 2	2321.44	4 ⁽⁻⁾	1317.61	3 ⁺	(E1)		$A_2=-0.09$ 2, $A_4=-0.04$ 3; pol.=+0.6 <i>I</i> (1993Se01).
1004 ‡		2907.5	3 ⁺ ,4,5 ⁺	1903.35	5 ⁺			
1004.2 2		2492.50	(6 ⁺)	1488.31	4 ⁺			
1012 ‡		2915.0		1903.07	4 ⁺			
1023.2 <i>I</i>	1.39 2	1903.07	4 ⁺	879.84	2 ⁺	E2		$A_2=+0.21$ <i>I</i> , $A_4=-0.01$ 2; pol.=+0.87 9 (1993Se01).
1029.4 <i>I</i>	0.23 <i>I</i>	2664.47	6 ⁽⁺⁾	1634.88	6 ⁺			$A_2=-0.4$ 3, $A_4=+0.0$ 4 (1993Se01).
1032.9 <i>I</i>	0.38 <i>I</i>	2350.52	(2,3)	1317.61	3 ⁺			$A_2=+0.25$ 5, $A_4=+0.16$ 7; pol.=+0.6 4 (1993Se01).
1033 ‡		3396.0		2362.98	5 ⁺			
1042.9 <i>I</i>	1.01 8	2677.72	7 ⁻	1634.88	6 ⁺	E1		$A_2=-0.19$ <i>I</i> , $A_4=+0.02$ 2; pol.=+0.79 7 (1993Se01).
1044 ‡		2947.8		1903.35	5 ⁺			
1045.3 <i>I</i>	1.02 2	2362.98	5 ⁺	1317.61	3 ⁺	E2		$A_2=+0.23$ 2, $A_4=-0.03$ 3; pol.=+0.6 <i>I</i> (1993Se01).
1062.9 <i>I</i>	0.37 <i>I</i>	2004.68	3 ⁽⁻⁾	941.91	4 ⁺	(E1)		$A_2=-0.13$ 5, $A_4=+0.03$ 8; pol.=+0.4 2 (1993Se01).
1071 ‡		2973.8	(4,5,6)	1903.07	4 ⁺			
1077.2 2	0.12 <i>I</i>	2395.21	(3,4 ⁺)	1317.61	3 ⁺			
1091 ‡		2993.9		1903.35	5 ⁺			
1093 ‡		2996.1		1903.07	4 ⁺			

$^{123}\text{Te}(\alpha, n\gamma)$ **1993Se01, 2000Ga08 (continued)** $\gamma(^{126}\text{Xe})$ (continued)

E_γ †	I_γ †	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. &	δ &	Comments
1099.8 1	1.57 2	1488.31	4 ⁺	388.61	2 ⁺	E2		$A_2=+0.25$ 1, $A_4=-0.01$ 2; pol.=+0.66 8 (1993Se01).
1100.2 1		2042.09	4 ⁽⁺⁾	941.91	4 ⁺	D+Q	+0.19 7	δ : from 2000Ga08.
1101.6 #		2419.06	1 ⁺ , 2 ⁺	1317.61	3 ⁺			
1110.4 2	0.28 1	2598.49	5	1488.31	4 ⁺			$A_2=-0.15$ 5, $A_4=+0.12$ 7; pol.=+1.0 4 (1993Se01).
1120.6 2	0.22 1	2608.76	(4,5)	1488.31	4 ⁺			$A_2=-0.23$ 6, $A_4=+0.07$ 8; pol.=+0.3 2 (1993Se01).
1127.6 1	0.57 1	2762.46	6 ⁻	1634.88	6 ⁺	E1		$A_2=+0.27$ 3, $A_4=+0.03$ 4; pol.=+0.0 2 (1993Se01).
								δ : 0.0 +12-4 (1993Se01).
1143 ‡		3578.6		2435.59	8 ⁺			
1144 ‡		2632.3		1488.31	4 ⁺			
1144.4 #		2086.4	2 ⁺	941.91	4 ⁺			
1154 ‡		2642.4		1488.31	4 ⁺			
1155 ‡		2789.8	(5)	1634.88	6 ⁺			
1184.2 1	0.44 2	2064.04	2 ⁽⁺⁾	879.84	2 ⁺	(M1+E2)		$A_2=-0.05$ 6, $A_4=-0.06$ 8; pol.=+0.8 2 (1993Se01).
								δ : +0.7 +70-9 or +0.14 18 or +1.7 +10-5 (2000Ga08).
1190 ‡		3625.6		2435.59	8 ⁺			
1206.7 #		2086.4	2 ⁺	879.84	2 ⁺	D+Q	+0.9 +5-3	δ : from 2000Ga08.
1208 ‡		2525.6		1317.61	3 ⁺			
1214 ‡		2702.1		1488.31	4 ⁺			
1220.1 1	0.91 2	2537.71	4	1317.61	3 ⁺			$A_2=-0.17$ 2, $A_4=+0.06$ 3; pol.=+0.6 1 (1993Se01).
1240.5 #		2875.4	(5 ⁺ , 7 ⁺)	1634.88	6 ⁺	D+Q		δ : -2.9 +5-7 or -0.38 8 for J=5 or +0.35 8 or +2.5 +7-5 for J=7 (2000Ga08).
1245.8 1	0.79 2	2880.87	7 ⁻	1634.88	6 ⁺	E1		$A_2=-0.23$ 2, $A_4=-0.05$ 3; pol.=+1.0 1 (1993Se01).
1253.5 1	0.23 1	2741.76	5 ⁽⁻⁾	1488.31	4 ⁺	(E1)		$A_2=-0.31$ 7, $A_4=-0.3$ 1; pol.=+1.0 5 (1993Se01).
1265.4 #		2753.43	3 ⁺ , 4, 5 ⁺	1488.31	4 ⁺			
1272.1 2	0.26 1	2214.22	6 ⁺	941.91	4 ⁺	E2		$A_2=+0.25$ 6, $A_4=-0.03$ 8; pol.= -0.3 3 (1993Se01).
1290.0 1	0.42 2	1678.52	2 ⁺	388.61	2 ⁺	D+Q		δ : +3.0 +9-6 or +0.47 8 (2000Ga08).
1299.7 #		2934.6	(5 ⁺ , 7 ⁺)	1634.88	6 ⁺	D+Q		δ : -0.2 1 or -8 +4-91 for J=5 or +0.2 1 or +5 +8-2 for J=7 (2000Ga08).
1314 ‡		2631.7		1317.61	3 ⁺			
1317.6 1		2952.22	(7,8)	1634.88	6 ⁺			
1342 ‡		2830.8		1488.31	4 ⁺			
1359.4 1	2.23 4	2301.38	5 ⁽⁻⁾	941.91	4 ⁺	(E1)		$A_2=-0.244$ 9, $A_4=+0.06$ 1; pol.=+0.8 6 (1993Se01).
1362 ‡		2850.3		1488.31	4 ⁺			
1368 ‡		3002.9		1634.88	6 ⁺			
1371.9 #		1760.5	0 ⁺	388.61	2 ⁺			
1379.6 1	1.44 3	2321.44	4 ⁽⁻⁾	941.91	4 ⁺	(E1)		$A_2=+0.24$ 2, $A_4=-0.02$ 2; pol.=+0.4 2 (1993Se01).
1382.1 1	0.18 1	2262.19	(3)	879.84	2 ⁺			$A_2=-0.4$ 1, $A_4=-0.2$ 2 (1993Se01).
1408.3 3	0.17 1	2350.52	(2,3)	941.91	4 ⁺			$A_2=-0.06$ 8, $A_4=-0.3$ 1 (1993Se01).

$^{123}\text{Te}(\alpha, n\gamma)$ **1993Se01,2000Ga08 (continued)** $\gamma(^{126}\text{Xe})$ (continued)

E_γ †	I_γ †	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. &	δ &	Comments
1422 ‡		2739.6		1317.61	3 ⁺			
1425.8 <i>I</i>	0.73 2	2305.64	(2,3)	879.84	2 ⁺			$A_2=+0.17$ 5, $A_4=-0.05$ 7; pol.=+0.7 5 (1993Se01).
1435.1 <i>I</i>	0.73 3	2314.87	(3 ⁻)	879.84	2 ⁺			$A_2=-0.19$ 3, $A_4=-0.03$ 4 (1993Se01).
1435.8 #		2753.43	3 ⁺ ,4,5 ⁺	1317.61	3 ⁺			
1453.5 <i>I</i>	0.60 2	2395.21	(3,4 ⁺)	941.91	4 ⁺	D+Q		$A_2=+0.22$ 4, $A_4=-0.01$ 6; pol.=-0.02 9 (1993Se01). δ : +0.09 8 for J=3 or -0.39 6 for J=4 (2000Ga08).
1456 ‡		3090.9		1634.88	6 ⁺			
1470.7 <i>I</i>	0.45 3	2350.52	(2,3)	879.84	2 ⁺			$A_2=+0.26$ 6, $A_4=-0.23$ 9 (1993Se01).
1471 ‡		3105.9		1634.88	6 ⁺			
1472.1 <i>I</i>	1.46 4	2414.19	5 ⁽⁻⁾	941.91	4 ⁺			$A_2=-0.31$ 2, $A_4=+0.08$ 2 (1993Se01).
1494 ‡		2811.5		1317.61	3 ⁺			
1521 ‡		3156.2		1634.88	6 ⁺			
1531 ‡		2848.5		1317.61	3 ⁺			
1539.2 <i>I</i>	0.23 <i>I</i>	2419.06	1 ⁺ ,2 ⁺	879.84	2 ⁺			
1550.5 <i>I</i>	0.19 <i>I</i>	2492.50	(6 ⁺)	941.91	4 ⁺			
1560 ‡		2877.2		1317.61	3 ⁺			
1561 ‡		3195.9		1634.88	6 ⁺			
1573.2 <i>I</i>	0.47 2	2515.12	(3)	941.91	4 ⁺			$A_2=+0.2$ 5, $A_4=+0.11$ 6; pol.=+0.5 6 (1993Se01).
1590 ‡		2907.5	3 ⁺ ,4,5 ⁺	1317.61	3 ⁺			
1608 ‡		3242.9		1634.88	6 ⁺			
1609.8 <i>I</i>	0.67 2	2489.53	(2 ⁺)	879.84	2 ⁺	D+Q		$A_2=+0.13$ 5, $A_4=-0.24$ 8 (1993Se01). δ : +0.6 +6-4 or +0.3 2 or +1.2 +9-5 (2000Ga08).
1615.9 <i>I</i>	1.79 3	2004.68	3 ⁽⁻⁾	388.61	2 ⁺	(E1)		$A_2=-0.23$ 1, $A_4=+0.04$ 2; pol.=+1.0 1 (1993Se01).
1636 ‡		3270.9		1634.88	6 ⁺			
1641 ‡		2520.7	0 ⁺ ,1,2	879.84	2 ⁺			
1653.5 <i>I</i>	0.89 2	2042.09	4 ⁽⁺⁾	388.61	2 ⁺	(Q)		$A_2=+0.15$ 3, $A_4=-0.01$ 4 (1993Se01).
1656.5 <i>I</i>	0.43 2	2598.49	5	941.91	4 ⁺			$A_2=-0.34$ 4, $A_4=+0.07$ 6; pol.=+0.5 6 (1993Se01).
1663 ‡		3297.9		1634.88	6 ⁺			
1666.0 4		2608.76	(4,5)	941.91	4 ⁺			
1675.4 <i>I</i>	0.58 2	2064.04	2 ⁽⁺⁾	388.61	2 ⁺	D(+Q)	+0.00 5	$A_2=+0.24$ 5, $A_4=-0.04$ 7 (1993Se01). δ : from 2000Ga08 .
1677 ‡		3312.6		1634.88	6 ⁺			
1678.2 2	0.80 2	1678.52	2 ⁺	0.0	0 ⁺			$A_2=+0.01$ 3, $A_4=+0.11$ 4; pol.=+0.5 4 (1993Se01).
1684 ‡		3001.6		1317.61	3 ⁺			
1694 ‡		3328.9		1634.88	6 ⁺			
1700 ‡		2642.4		941.91	4 ⁺			

¹²³Te($\alpha, n\gamma$) **1993Se01,2000Ga08 (continued)**

$\gamma(^{126}\text{Xe})$ (continued)

E_γ †	I_γ †	$E_i(\text{level})$	J_i^π	E_f	J_f^π	Mult. &	δ &	Comments
1722.7 1	0.32 2	2664.47	6 ⁽⁺⁾	941.91	4 ⁺	(E2)		$A_2=+0.4$ 1, $A_4=-0.0$ 2; pol.=+0.8 4 (1993Se01).
1724 ‡		2603.8		879.84	2 ⁺			
1725 ‡		3359.9		1634.88	6 ⁺			
1739 ‡		2680.9		941.91	4 ⁺			
1752 ‡		2631.7		879.84	2 ⁺			
1760 ‡		2702.1		941.91	4 ⁺			
1763 ‡		2642.4		879.84	2 ⁺			
1799.4 2	0.13 1	2741.76	5 ⁽⁻⁾	941.91	4 ⁺			
1815.1 #		2694.7		879.84	2 ⁺			
1823.6 #		2765.5	(3 ⁺ , 5 ⁺)	941.91	4 ⁺	D+Q		δ : -0.32 9 or -6 +2-5 for J=3 or +0.3 1 for J=5 (2000Ga08).
1847.8 #		2789.8	(5)	941.91	4 ⁺	D+Q		δ : -0.05 8 or +14 +151-7 or ≤ -100 (2000Ga08).
1859 ‡		2800.9		941.91	4 ⁺			
1877 ‡		2756.8		879.84	2 ⁺			
1877 ‡		3194.6		1317.61	3 ⁺			
1909 ‡		3543.9		1634.88	6 ⁺			
1925.9 2	0.16 1	2314.87	(3 ⁻)	388.61	2 ⁺			$A_2=-0.3$ 1, $A_4=+0.1$ 2 (1993Se01).
1936 ‡		2878.2		941.91	4 ⁺			
1956 ‡		2897.9		941.91	4 ⁺			
1970.0 3	0.13 2	2358.82	1 ⁺	388.61	2 ⁺	D+Q	+0.8 +10-5	δ : from 2000Ga08 . $A_2=-0.5$ 2, $A_4=-0.2$ 3 (1993Se01).
1987 ‡		2928.9		941.91	4 ⁺			
1997 ‡		2877.2		879.84	2 ⁺			
2011 ‡		2952.9		941.91	4 ⁺			
2020 ‡		2961.9		941.91	4 ⁺			
2030.5 #		2419.06	1 ⁺ , 2 ⁺	388.61	2 ⁺			
2057 ‡		2998.9		941.91	4 ⁺			
2062 ‡		2941.9		879.84	2 ⁺			
2086.4 #		2086.4	2 ⁺	0.0	0 ⁺			
2099.8 3	0.17 1	2489.53	(2 ⁺)	388.61	2 ⁺			$A_2=+0.9$ 3, $A_4=-0.8$ 4 (1993Se01).
2131 ‡		3072.9		941.91	4 ⁺			
2132 ‡		2520.7	0 ⁺ , 1, 2	388.61	2 ⁺			
2146 ‡		3025.9		879.84	2 ⁺			
2157 ‡		3099.3		941.91	4 ⁺			
2176.9 #		2565.5		388.61	2 ⁺			δ : +0.3 1 for J=3 (2000Ga08).

¹²³Te(α ,n γ) [1993Se01,2000Ga08](#) (continued)

$\gamma(^{126}\text{Xe})$ (continued)

E_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π	E_γ [†]	$E_i(\text{level})$	J_i^π	E_f	J_f^π
2206 [‡]	2594.6		388.61	2 ⁺	2371 [‡]	2759.6		388.61	2 ⁺
2297 [‡]	2685.6		388.61	2 ⁺	2409 [‡]	2797.6	0 ⁺ ,1,2	388.61	2 ⁺
2359.1 [#]	2358.82	1 ⁺	0.0	0 ⁺	2430 [‡]	2818.6		388.61	2 ⁺
					2471 [‡]	2859.6		388.61	2 ⁺

[†] From [1993Se01](#), unless otherwise noted.

[‡] Shown only in figures of the level scheme ([1993Se01](#)). Evaluators assumed 1 keV error.

[#] From [2000Ga08](#). Shown only in figures of the level scheme or in Table 2. Evaluators assumed 0.3 keV error below 1 MeV. Above 1 MeV, 0.5 keV error for E_γ 's quoted to nearest tenth of a keV and 1 keV quoted to nearest keV.

@ Calculated from the branching ratios in [2000Ga08](#) and the intensity of 1023 keV γ in [1993Se01](#).

& From $\gamma(\theta)$, $\gamma\gamma(\theta)$ and linear pol.

^a Total theoretical internal conversion coefficients, calculated using the BrIcc code ([2008Ki07](#)) with Frozen orbital approximation based on γ -ray energies, assigned multipolarities, and mixing ratios, unless otherwise specified.

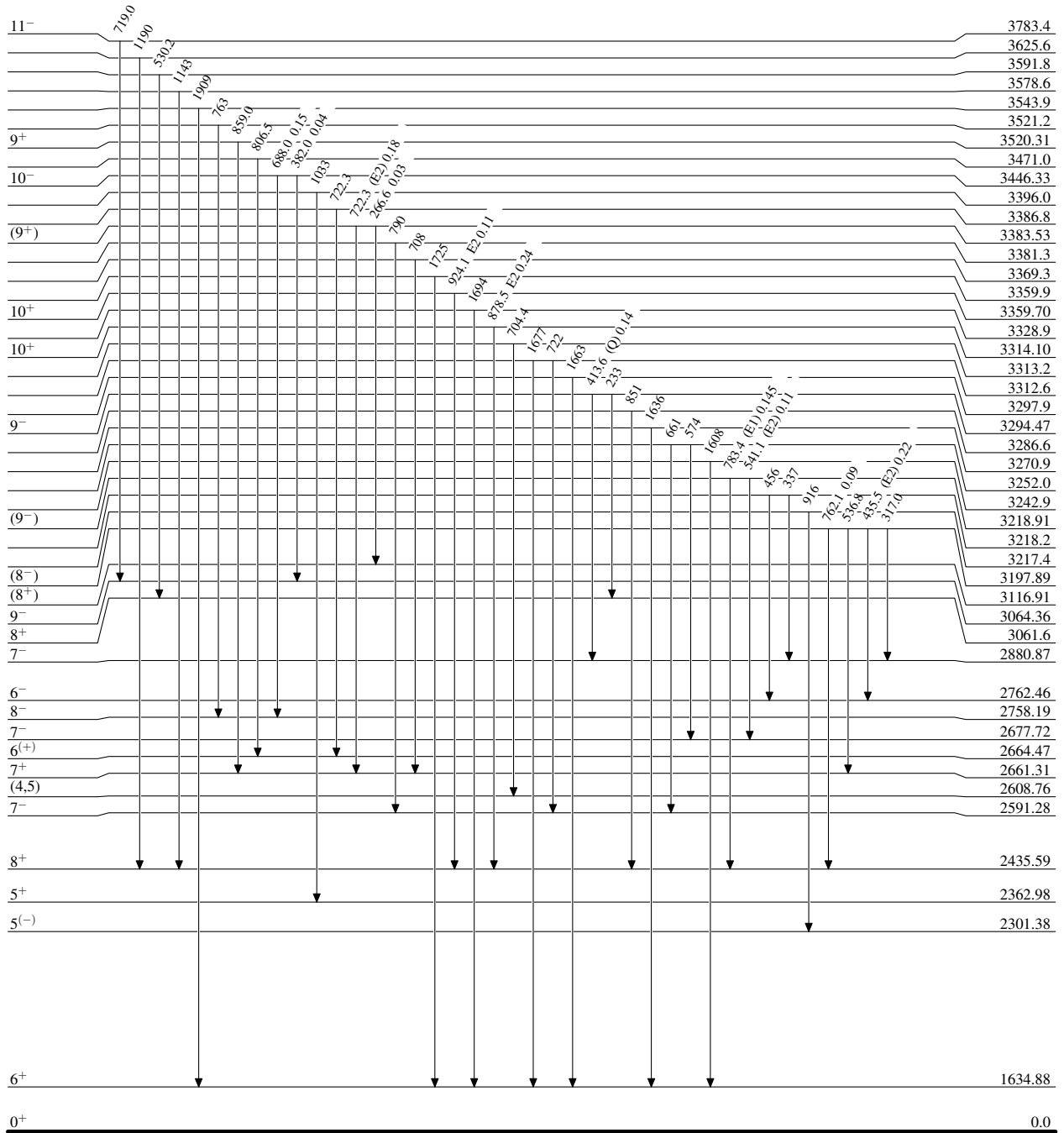
$^{123}\text{Te}(\alpha, n\gamma)$ 1993Se01,2000Ga08

Level Scheme

Intensities: Relative I_γ

Legend

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

 $^{126}_{54}\text{Xe}_{72}$

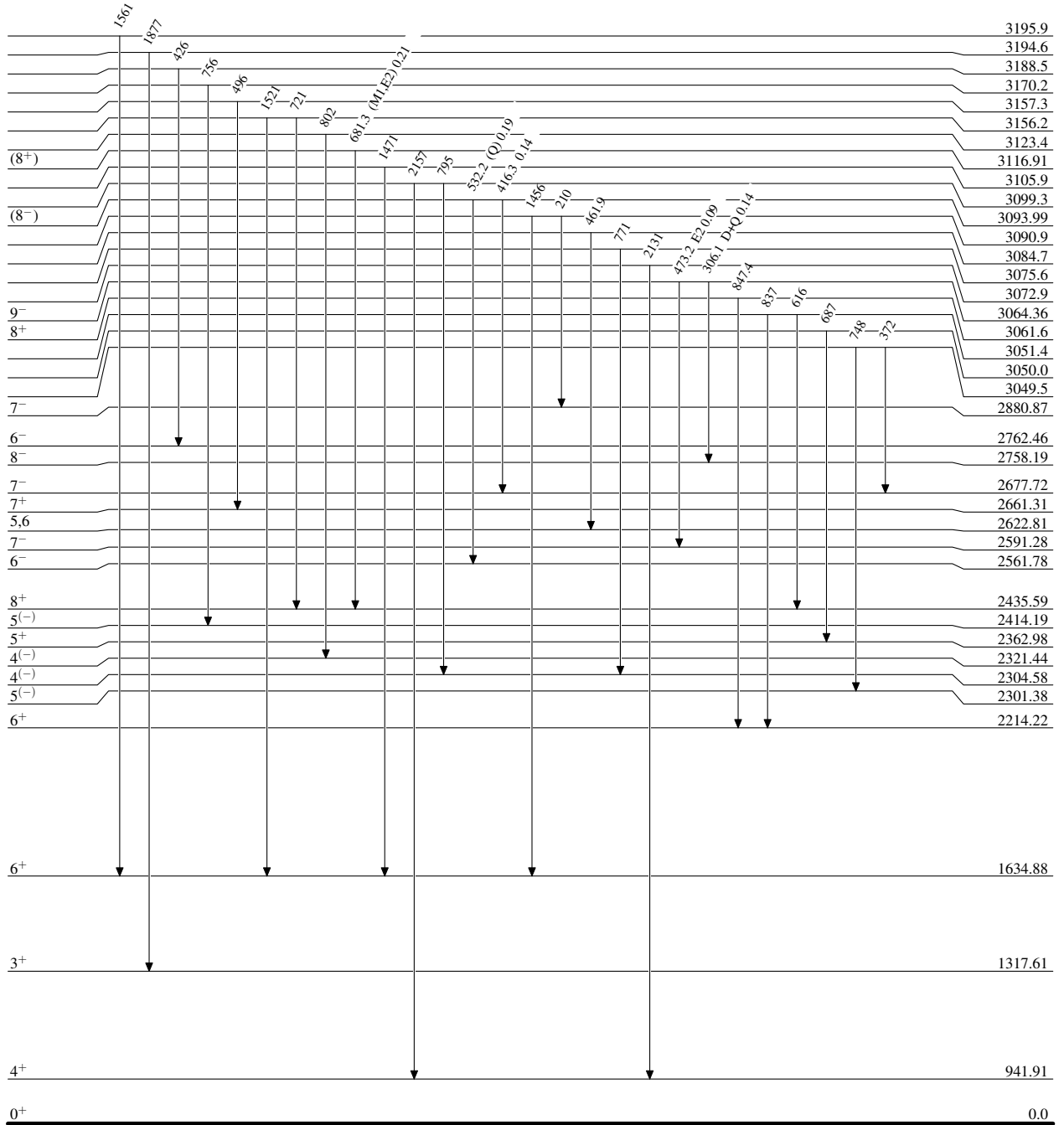
$^{123}\text{Te}(\alpha, n\gamma)$ 1993Se01,2000Ga08

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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

 $^{126}_{54}\text{Xe}_{72}$

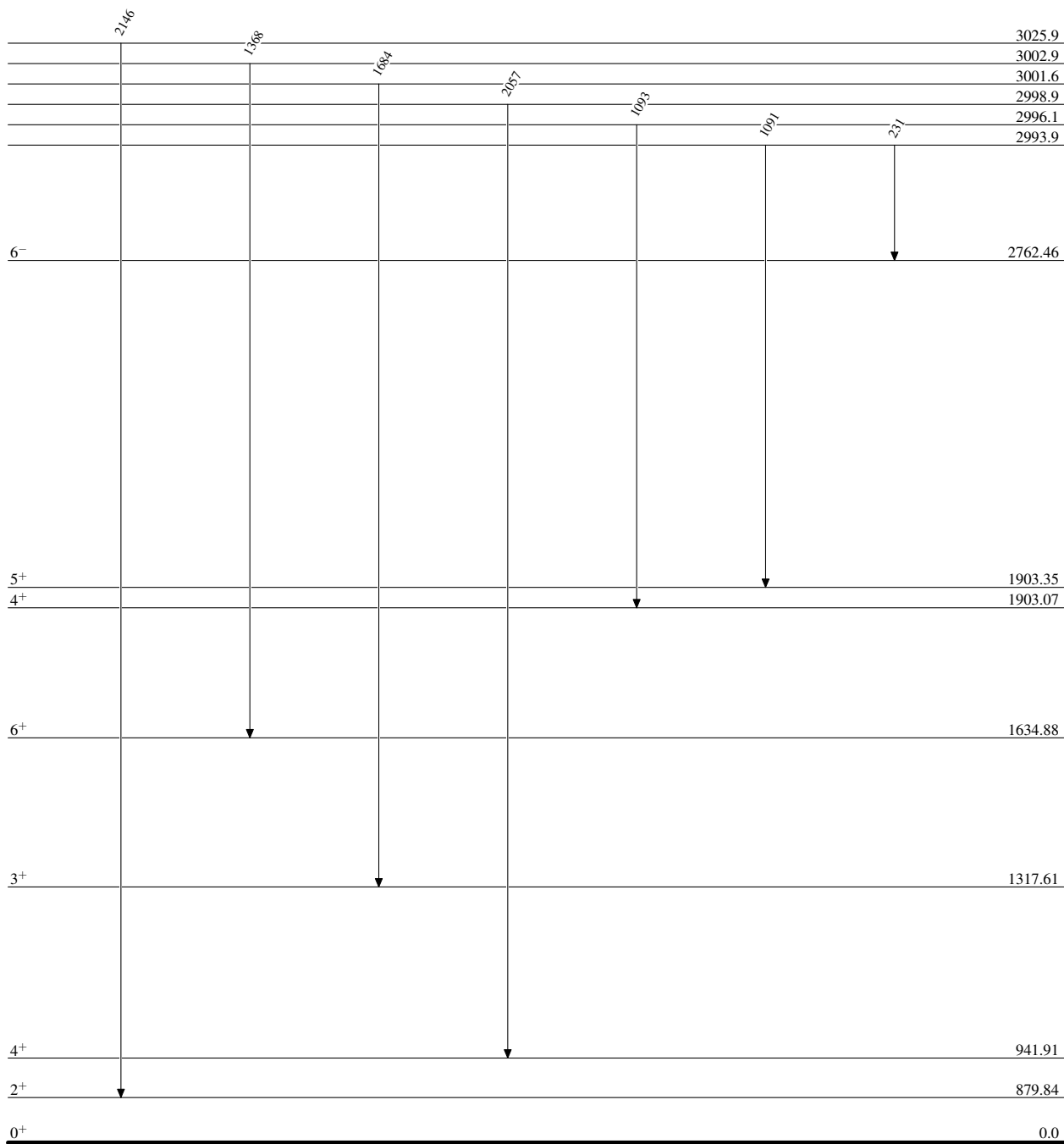
$^{123}\text{Te}(\alpha, n\gamma)$ **1993Se01,2000Ga08**

Level Scheme (continued)

 Intensities: Relative I_γ

Legend

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


 $^{126}_{54}\text{Xe}_{72}$

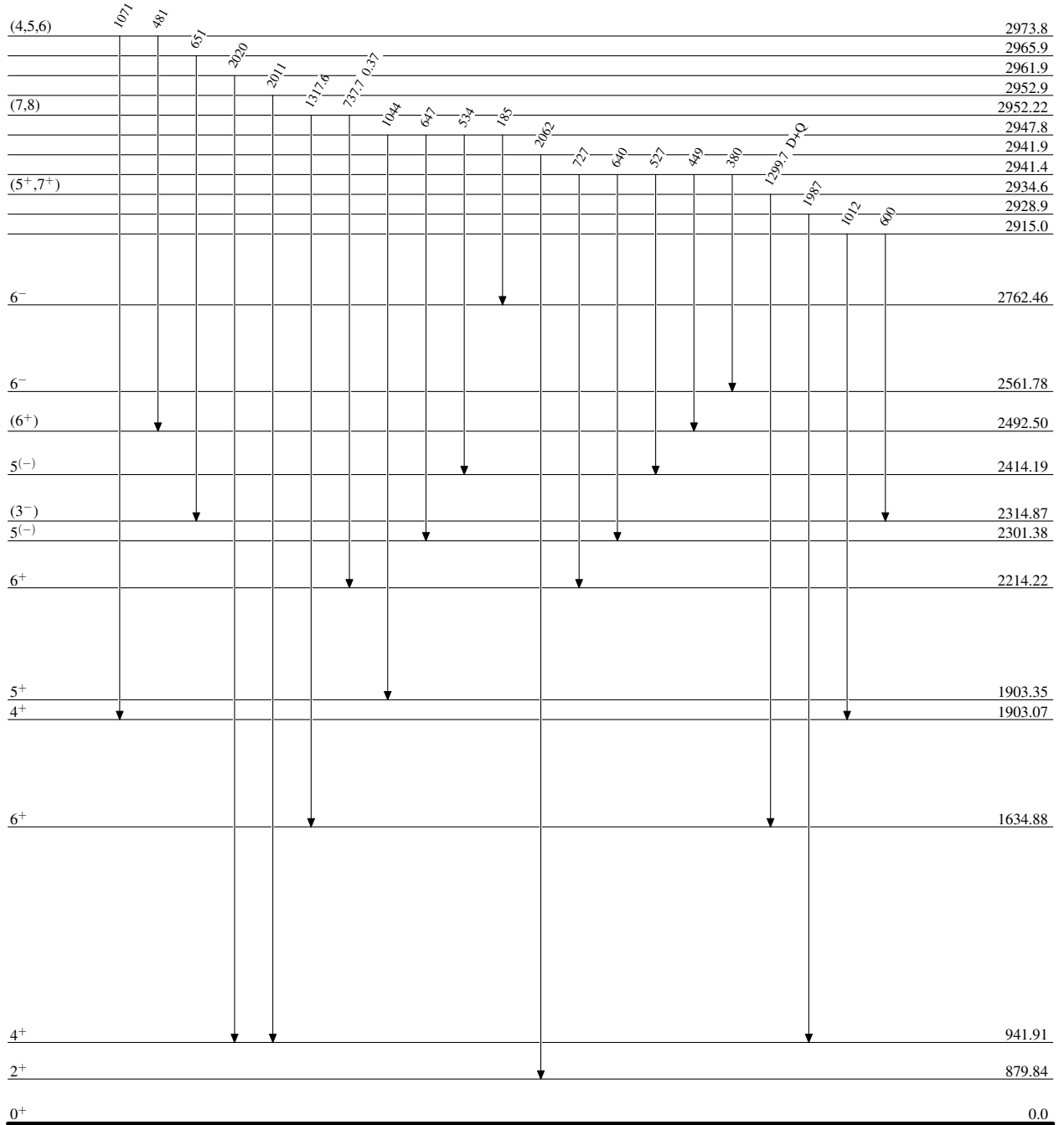
$^{123}\text{Te}(\alpha, n\gamma)$ 1993Se01,2000Ga08

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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

 $^{126}_{54}\text{Xe}_{72}$

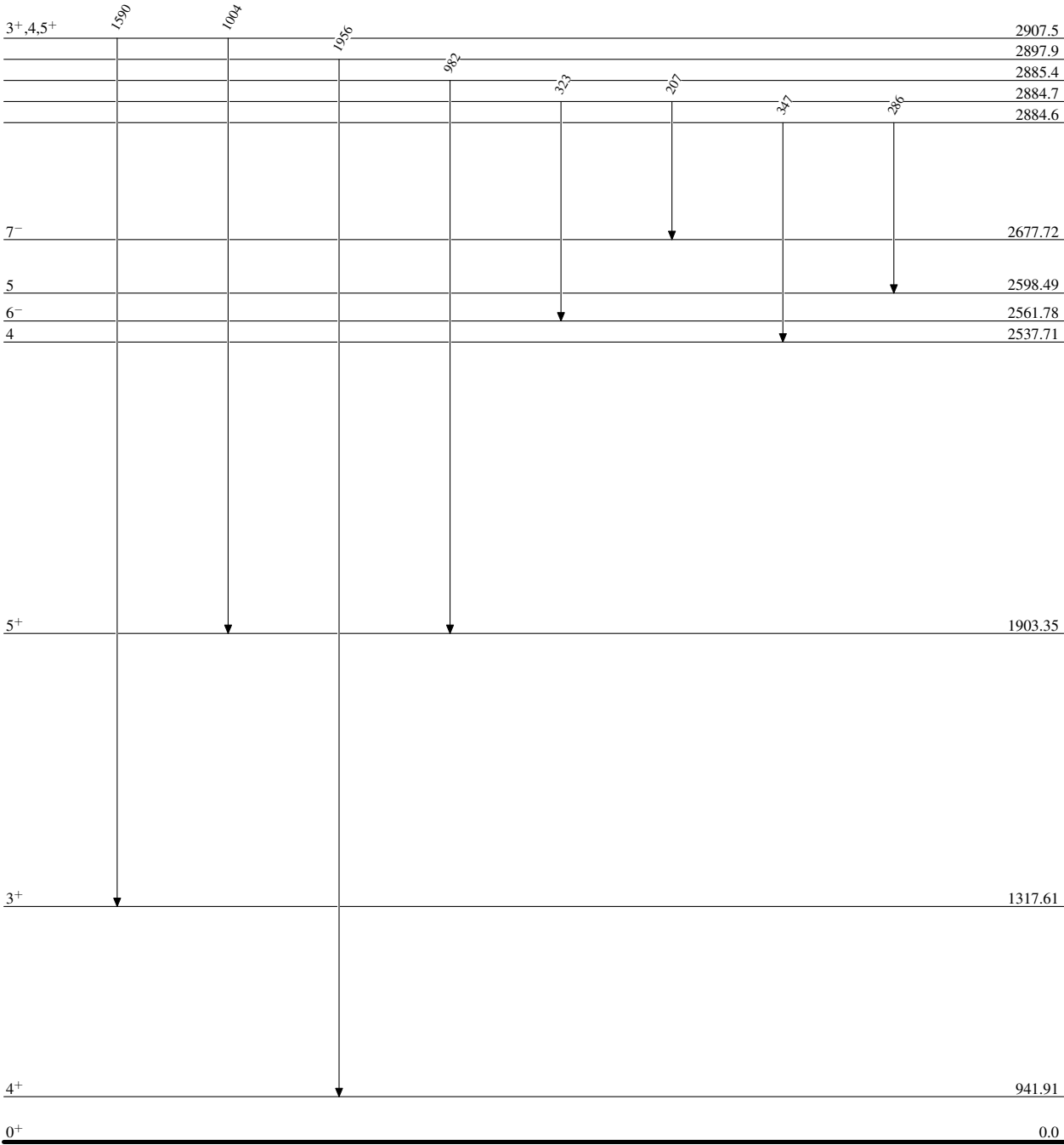
¹²³Te(α,nγ) 1993Se01,2000Ga08

Level Scheme (continued)

Intensities: Relative I_γ

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



¹²⁶Xe₅₄72

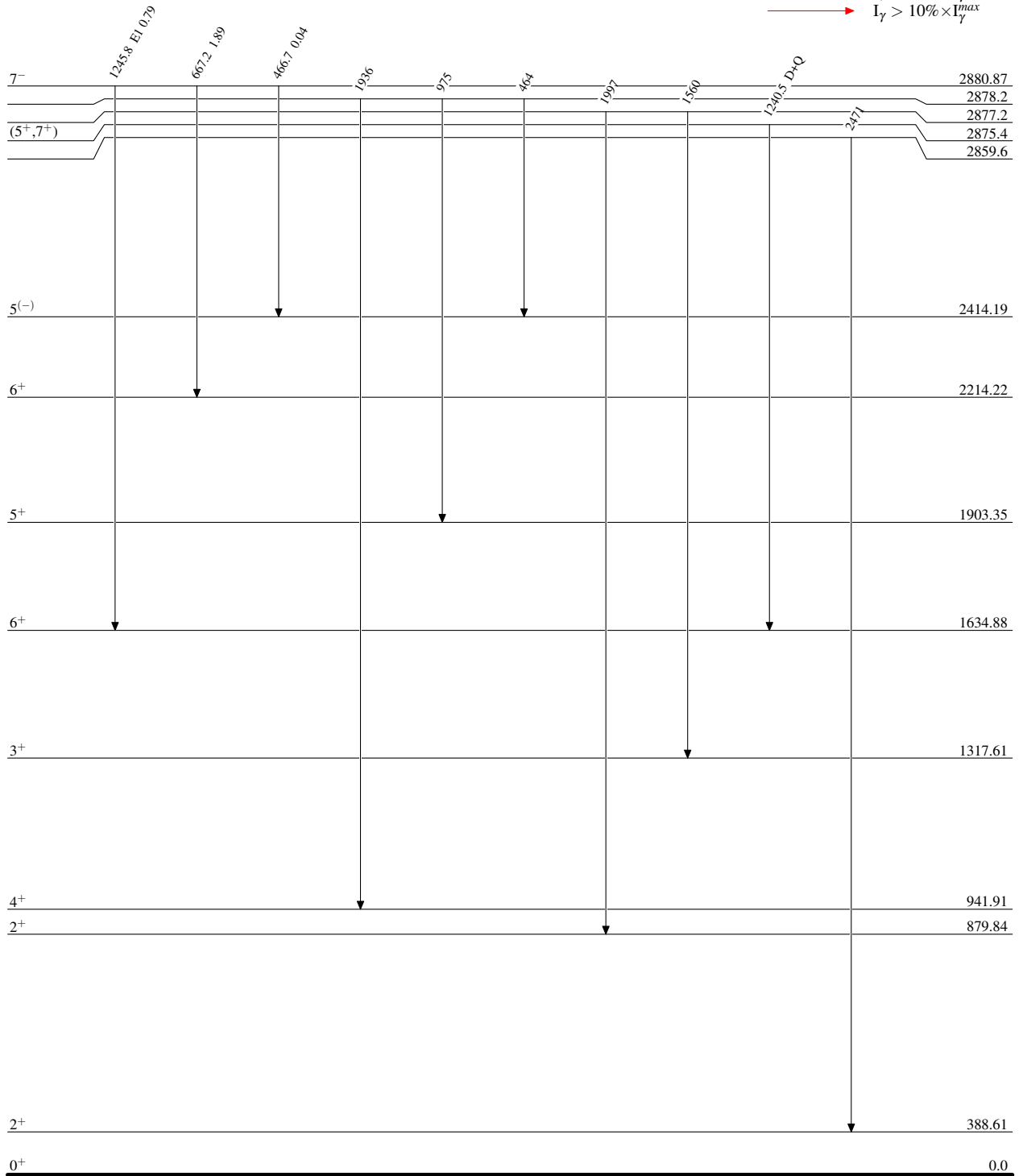
$^{123}\text{Te}(\alpha, n\gamma)$ 1993Se01,2000Ga08

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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

 $^{126}_{54}\text{Xe}_{72}$

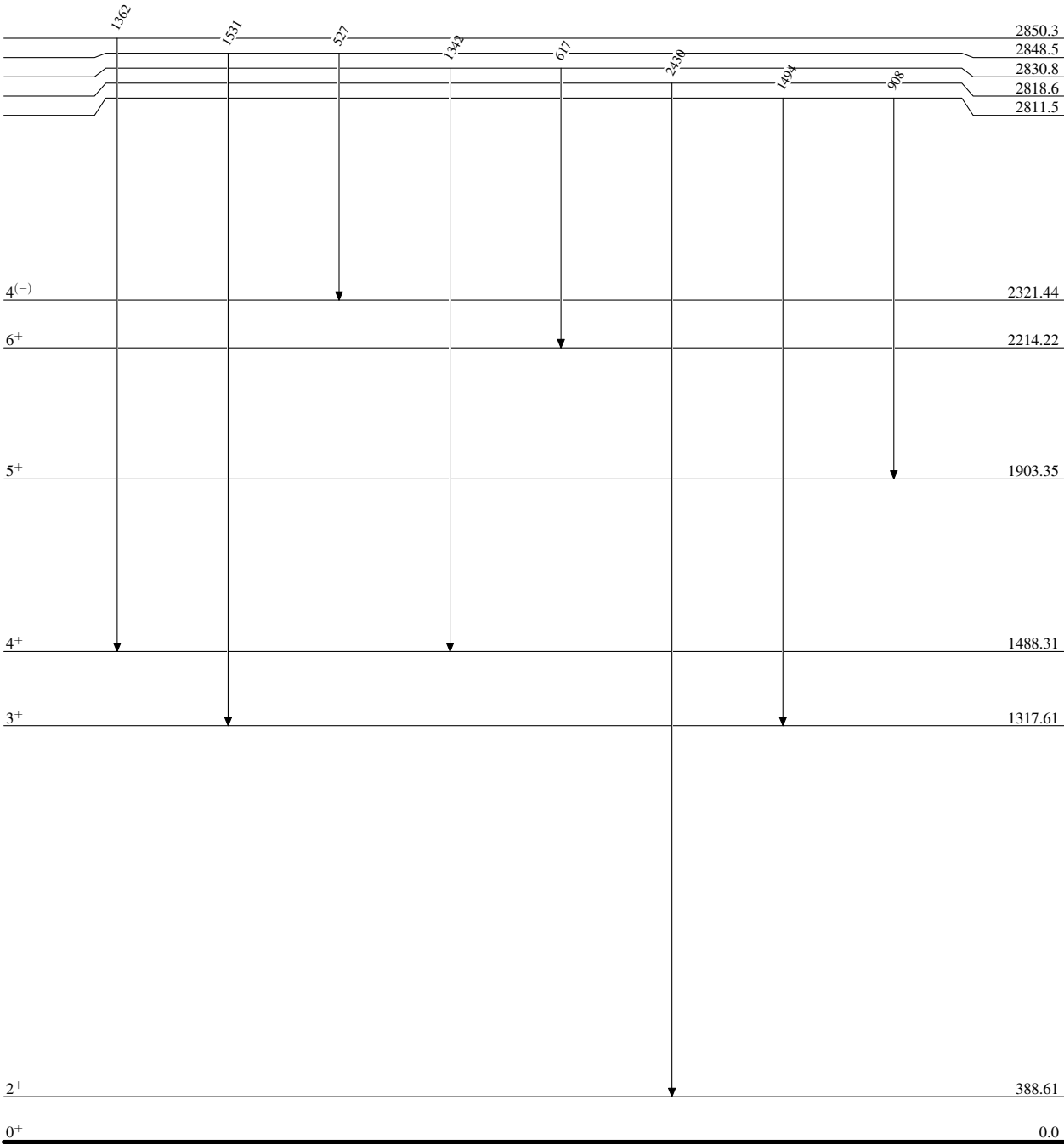
¹²³Te(α,nγ) 1993Se01,2000Ga08

Level Scheme (continued)

Intensities: Relative I_γ

Legend

- I_γ < 2% × I_γ^{max}
- I_γ < 10% × I_γ^{max}
- I_γ > 10% × I_γ^{max}



¹²⁶Xe₅₄

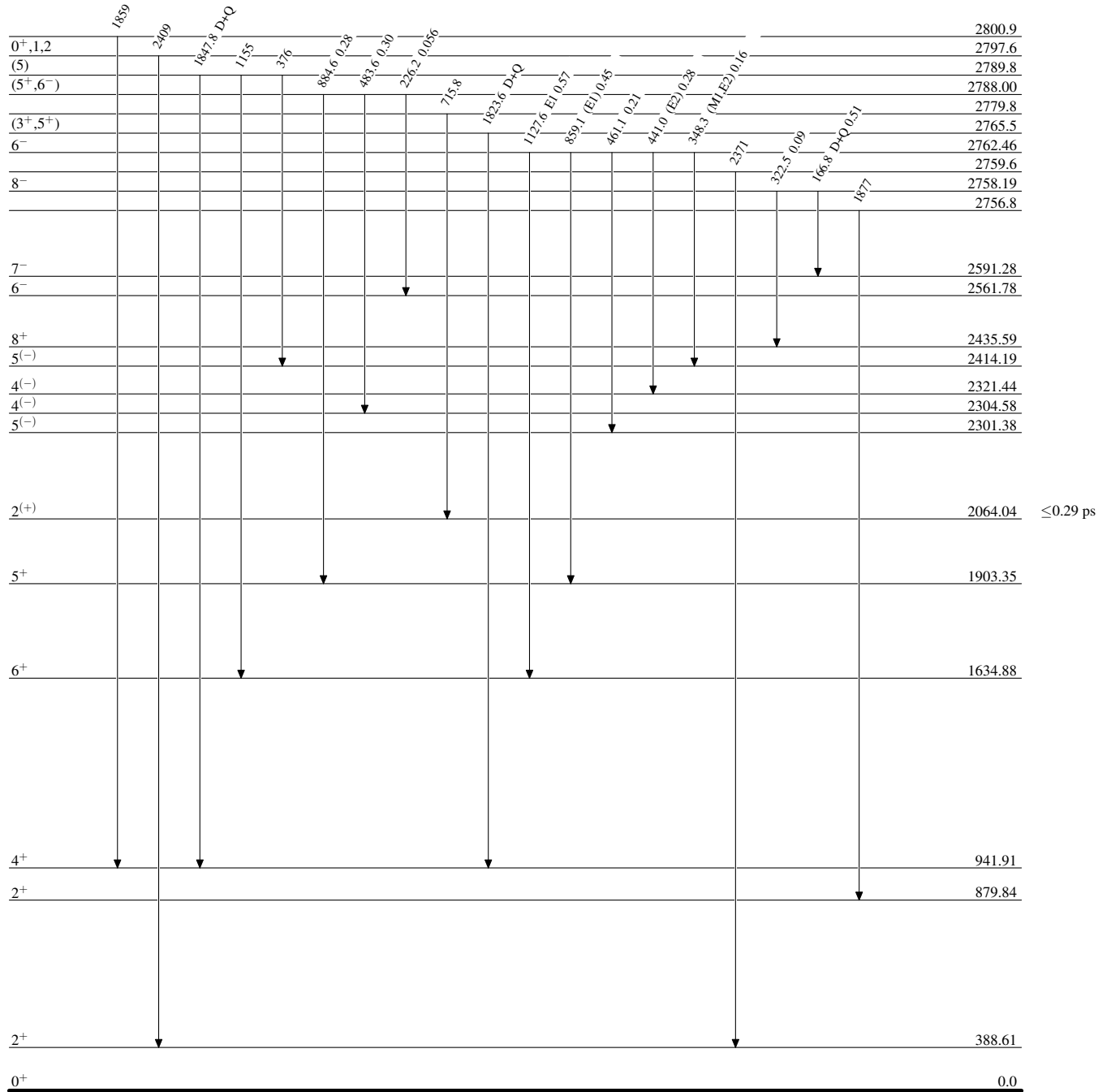
$^{123}\text{Te}(\alpha, n\gamma)$ 1993Se01,2000Ga08

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



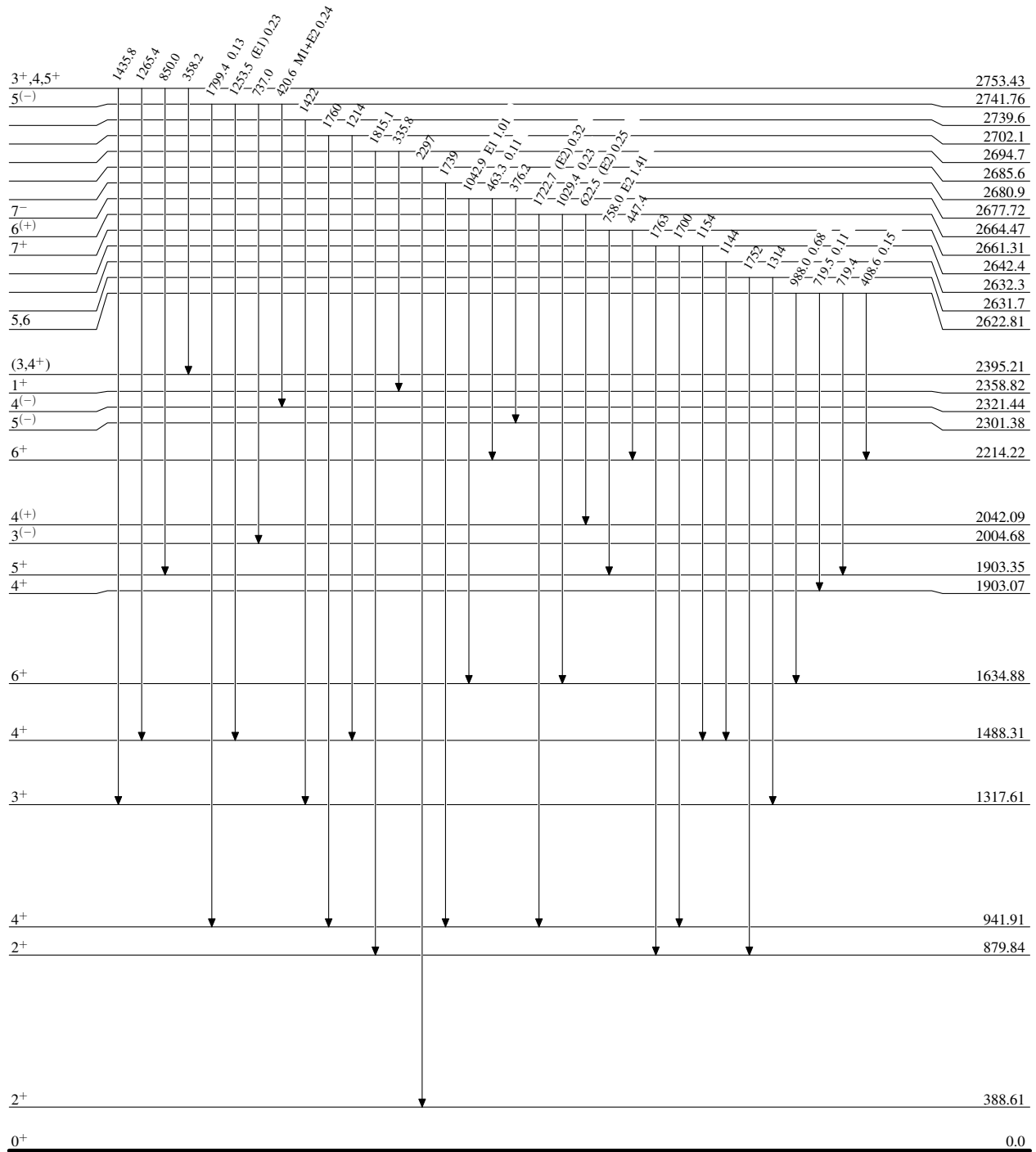
$^{123}\text{Te}(\alpha, n\gamma)$ 1993Se01,2000Ga08

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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

 ≤ 0.070 ps

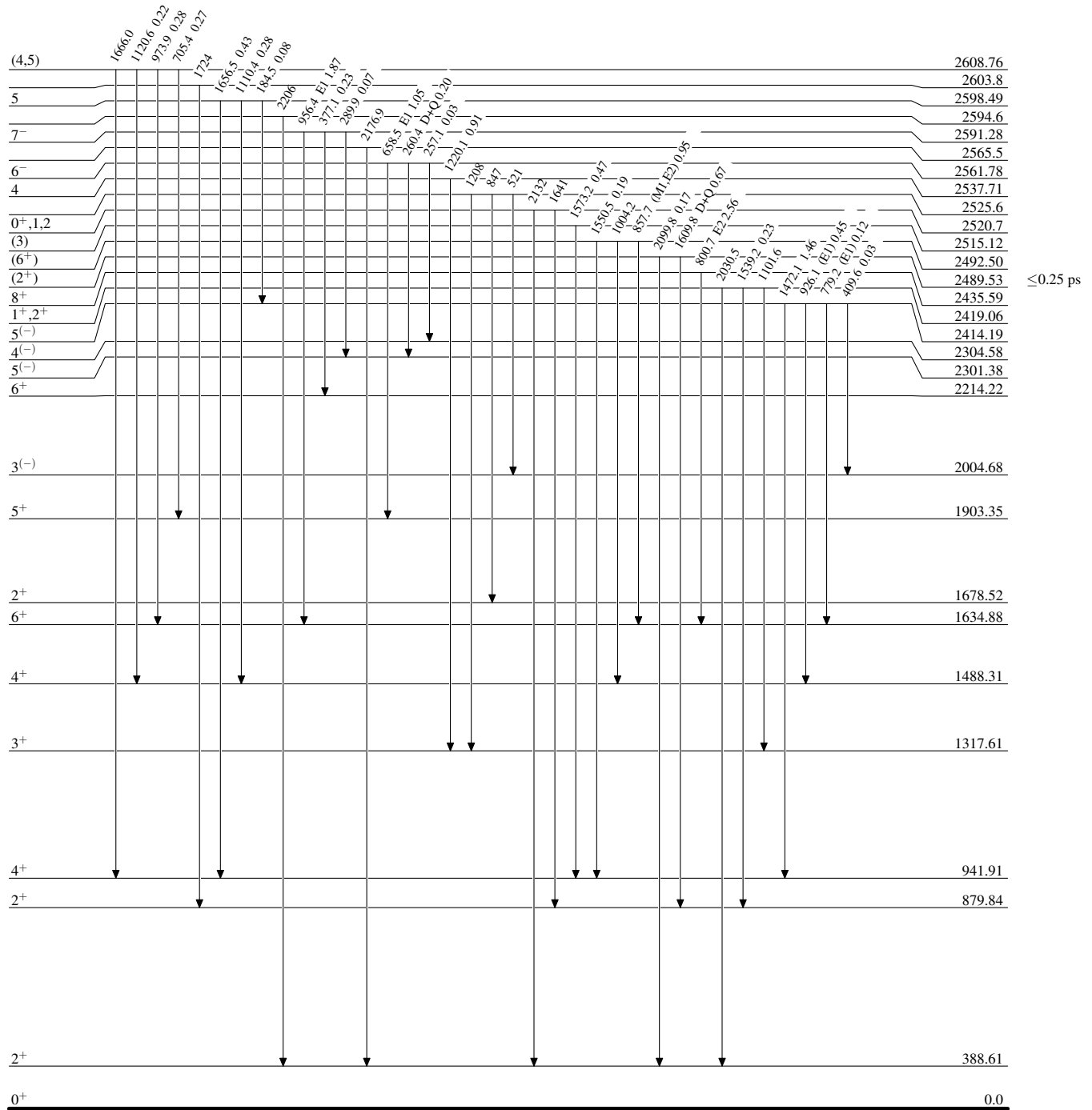
$^{123}\text{Te}(\alpha, n\gamma)$ 1993Se01,2000Ga08

Level Scheme (continued)

Intensities: Relative I_γ

Legend

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



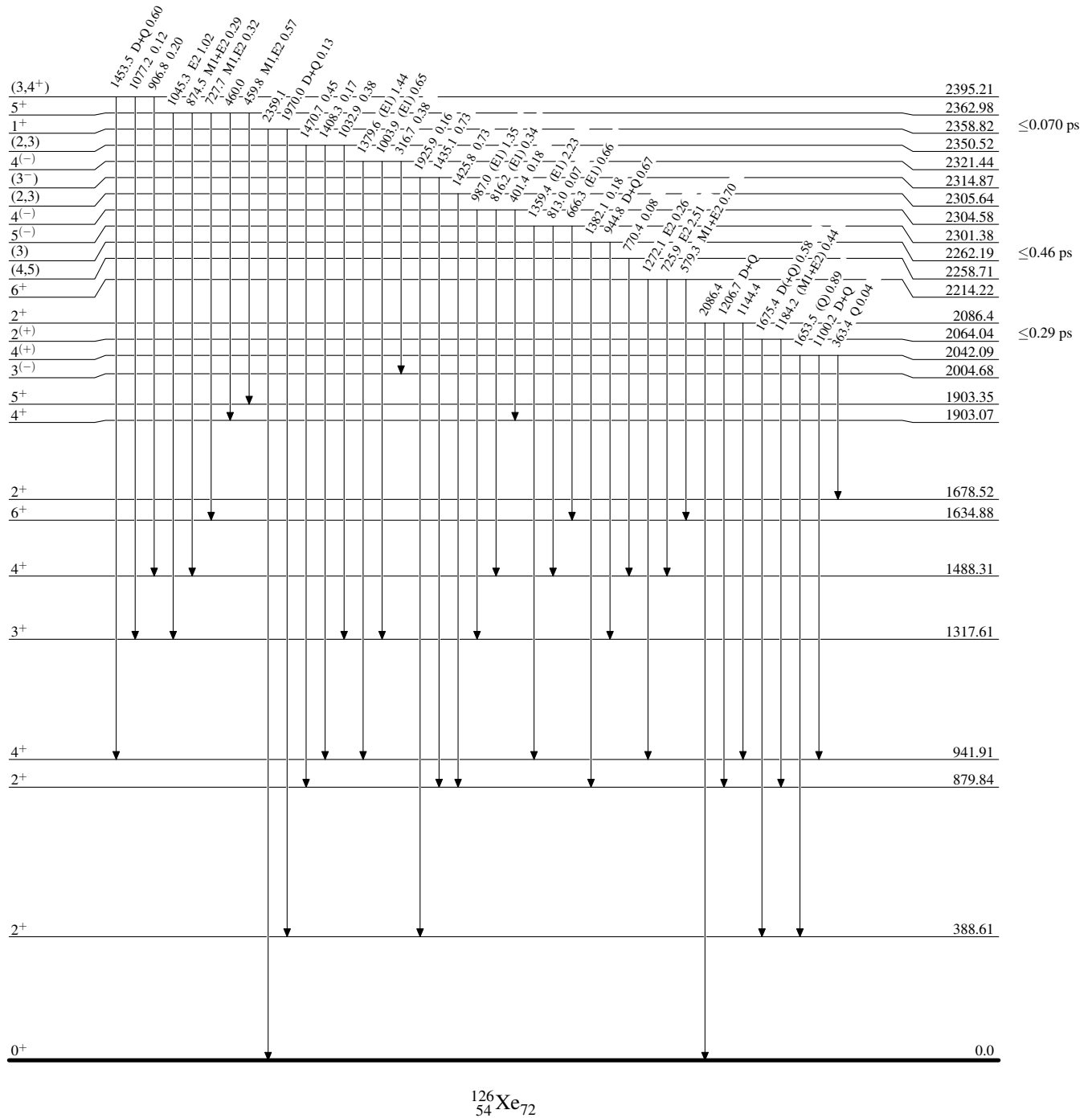
$^{123}\text{Te}(\alpha, n\gamma)$ 1993Se01,2000Ga08

Level Scheme (continued)

Intensities: Relative I_γ

Legend

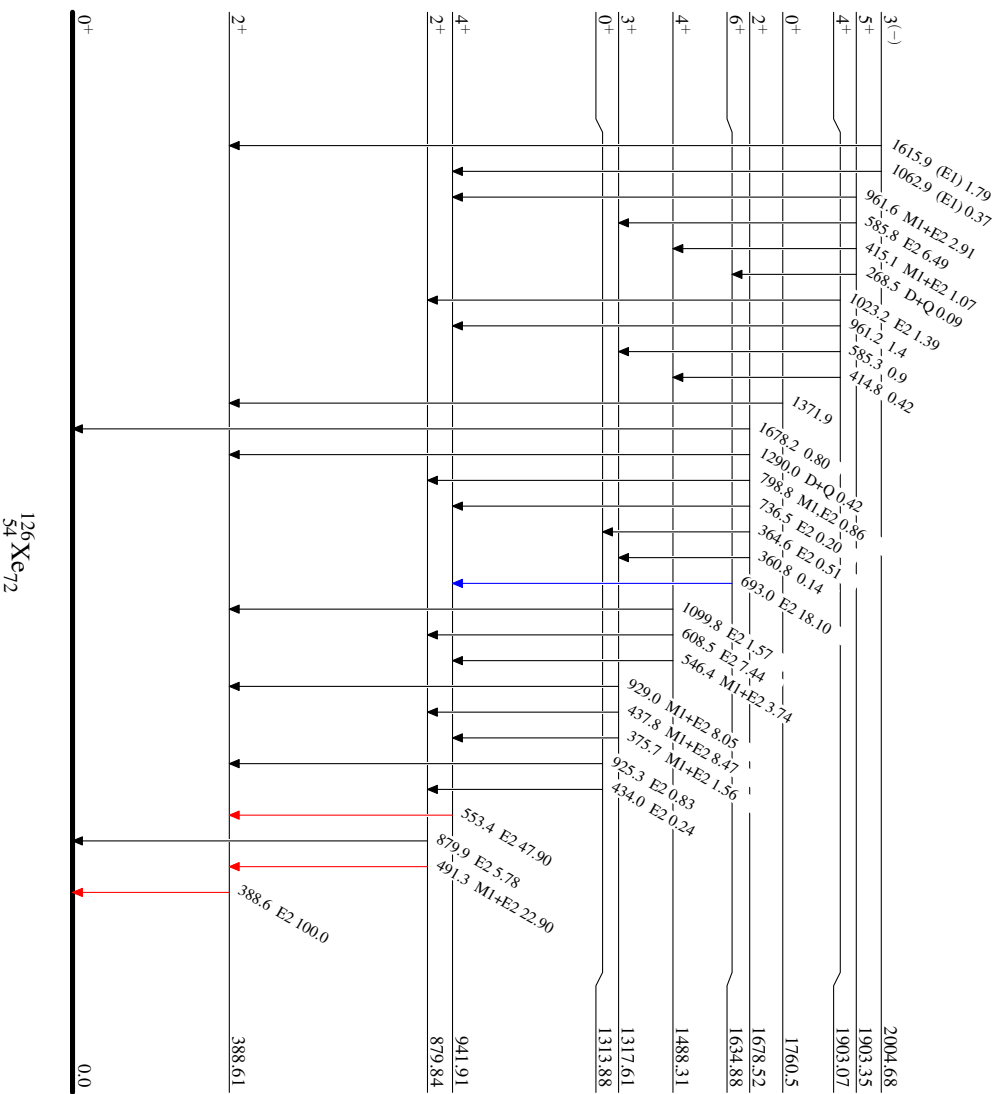
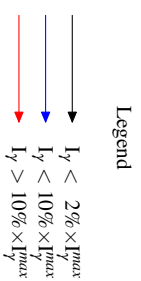
- $\longrightarrow$ $I_\gamma < 2\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma < 10\% \times I_\gamma^{\max}$
 $\longrightarrow$ $I_\gamma > 10\% \times I_\gamma^{\max}$

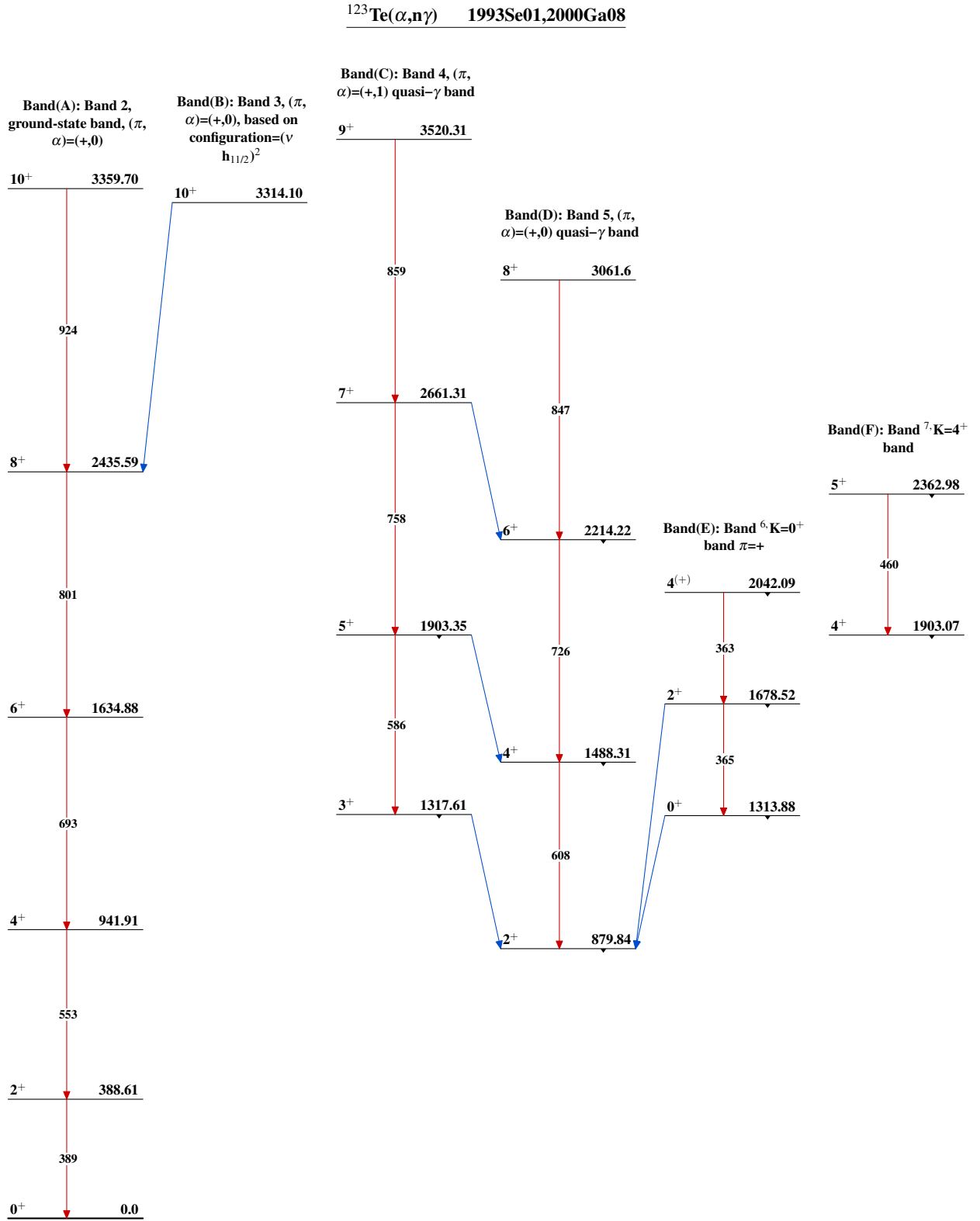
 $^{126}_{54}\text{Xe}_{72}$

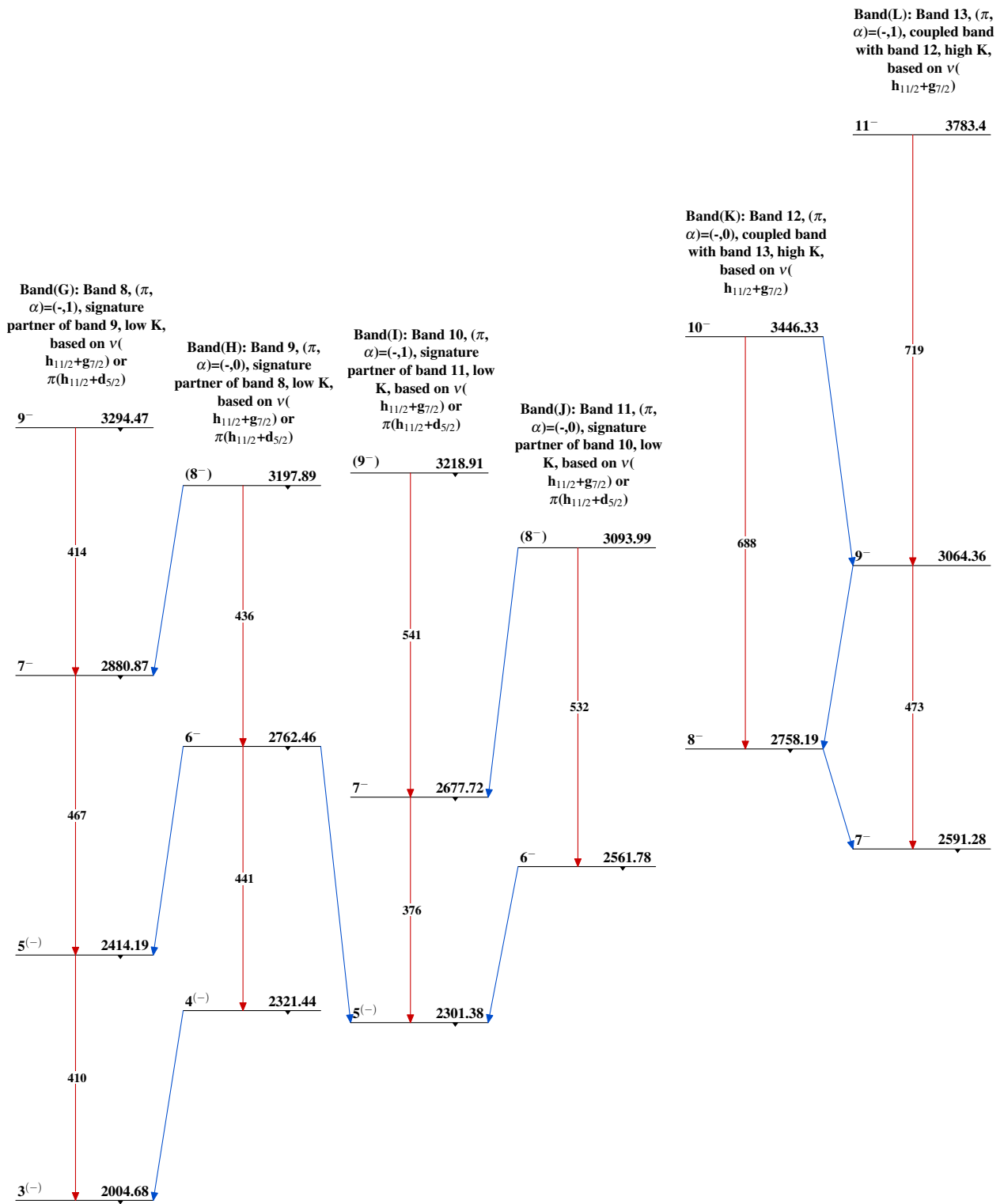
¹²³Te(α,nγ) **1993Se01,2000Ga08**

Level Scheme (continued)

Intensities: Relative I_γ





$^{123}\text{Te}(\alpha, n\gamma)$ 1993Se01,2000Ga08 (continued) $^{126}_{54}\text{Xe}_{72}$

¹²³Te(α ,n γ) **1993Se01,2000Ga08 (continued)**

Band(M): Band 14, band
member based on 3117-keV
level

(9⁺) 3383.53

267

(8⁺) 3116.91

¹²⁶Xe₅₄