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

E=195, 205 MeV; enriched target; Ge-detector array; γ , $\gamma\gamma$, angular distribution ratio, DSAM.

¹²⁶Xe Levels

E(level) [†]	$J^{\pi \ddagger}$	E(level) [†]	$J^{\pi \ddagger}$
0.0 <mark>&</mark>	0^{+}	4240.0 ^h	12-
388.6 <mark>&</mark>	2^{+}	4274.2 [@]	12^{+}
879.7 ^C	2+ #	4531.4 <mark>8</mark>	(12 ⁻)
942.0 <mark>&</mark>	4+	4566.1 ⁱ	13-
1317.6 <mark>b</mark>	3+ #	4596.2 ^e	(12^{-})
1488.4 ^C	4+ #	4619.4 <mark>a</mark>	14+
1634.9 <mark>&</mark>	6+	4732.3 ^f	13-
1903.3 <mark>b</mark>	5+ #	4736.4 ^d	13-
2214.6 ^C	6+ #	4768.9 <mark>j</mark>	
2300.5 ^ƒ	5 ^{(-)#}	5090.5 [@]	14^{+}
2301.9		5096.6 ^h	14-
2413.6 ^d	5 ^{(-)#}	5264.2	14^{+}
2435.3 <mark>&</mark>	8+	5333.2 ^e	$14^{(-)}$
2561.8 <mark>8</mark>	6 ^{-#}	5365.0 <mark>8</mark>	(14 ⁻)
2590.8 ¹	7 ^{-#}	5392.5 ¹	15-
2661.3 ^b	7+ #	5508.9 ^a	16+
2677.4 ⁵	7-#	5694.9 ^j	
2757.1 ^h	8-#	5726.2 ^m	15-
2880.6 ^d	7-#	5923.4 [@]	16+
3061.6 ^C	8+ #	5954.5 ⁿ	
3063.7 ¹	9 ^{-#}	6012.6 ⁿ	16-
3093.5 <mark>8</mark>	(8 ⁻) [#]	6126.2 ^p	16+
3117.4 <mark>/</mark>	$(8^+)^{\#}$	6198.2 ^e	(16 ⁻)
3197.5 ^e	(8 ⁻) [#]	6248.4 ¹	17-
3218.1 ^J	(9 ⁻) [#]	6255.3 ⁸	(16 ⁻)
3294.5 ^{<i>a</i>}	9 ⁻	6345.3 ^m	17-
3313.84	10+	6509.74	18+
3359.2 ·	10 ⁺	6597.6 [×]	16+
3383.4J	(9 ⁺)"	6611.1	16 ⁺
3446.2 ⁿ	10 ⁻ "	$68/6.7^{\text{K}}$	$\Gamma^{(+)}$
3520.3	9.1	6915.2 ⁿ	18()
3759.48	(10)	6981.6 ⁿ	18
3783.0	11 "	7039.2 ^P	18'
3884 2 ^a	(10) 12^+	7185.0°	19 19 ⁻
39204^{f}	12	7245 3	18
3963.5^{d}	11-	7252.8 ^k	18(+)
3998 5 <i>j</i>	11	7297 67 <mark>8</mark>	(18^{-})
5770.5		, 277.0	(10)

¹²⁶Xe Levels (continued)

E(level) [†]	Jπ‡	Comments
7587.4 ^a	20+	
7615.8 ^k	$19^{(+)}$	
7756.4 ⁿ	$20^{(-)}$	
8000.1 ^h	20-	
8013.5 ^p	20^{+}	
8037.8 <mark>k</mark>	$20^{(+)}$	
8165.5 ^m	21-	
8234.8 ⁱ	21-	
8433.5 ^k	$21^{(+)}$	
8645.7 <mark>n</mark>	$22^{(-)}$	
8745.5 ^a	22^{+}	
8837.9 <mark>9</mark>	22^{+}	
8927.4 ^k	22^{+}	
9017.90	(22 ⁻)	
9033.2 ⁿ	22-	
9054.7P	22+	
9257.8 ^m	23	
9369.0°	23	
9457.7 ^k	$23^{(+)}$	
9/50./*	24	
$98/6.3^{\circ}$	24 '	E(layal). It is suggested in 2007 U-24 that this layal may not avist and that the initial state of 1170 by may
9910.2	24	E(level): It is suggested in 200/Ha34 that this level may not exist and that the initial state of 11/0.87 may be the I=24 member of hand 15
0016 5 <mark>k</mark>	$24^{(+)}$	be the $j-24$ member of band 15.
9968.9 <mark>9</mark>	24^{+}	
10040.0 ⁰	$24^{(-)}$	
10161.8 <mark>P</mark>	24^{+}	
10408.0 ^m	25^{-}	
10508.1 ^k	$25^{(+)}$	
10523.8 ⁱ	25^{-}	
10910.0 ^k	$26^{(+)}$	
10929.2 ⁿ	$26^{(-)}$	
10933.3 ¹	26+	
11082.6	$26^{(-)}$	
11129.7 <mark>0</mark>	26(-)	
11151.8 ⁴	26^+	
11535.5P	26	
11530.4° 11570.1 ^m	(27^{+})	
11579.1	27-	
12048	27 28(-)	
12040.4 12002.5l	20+	
12095.5 12281.60	$20 \\ 28(-)$	
12449.0 <mark>9</mark>	28 ⁺	
12572.9 ^p	28+	
12849.4		
12853.7 ⁱ	29-	
13247.7 ¹	30+	

¹²⁶Xe Levels (continued)

E(level) [†]	Jπ‡	Comments
13331.8 ⁿ	30(-)	
13526.0 ⁰	$30^{(-)}$	
13858.6 ⁹	30^{+}	
13892.0 ^p	30^{+}	
14858.1 ⁰	$32^{(-)}$	
15261.2 ^P	32+	
16289.6 ⁰	$34^{(-)}$	
16733.4 ^P	34+	
17830.3 ⁰	$36^{(-)}$	
18298.7 ^P	36+	
19488.6 <mark>0</mark>	$38^{(-)}$	
19960.3 ^p	38+	
21269.90	$40^{(-)}$	
21716.9 <mark>P</mark>	40^{+}	
23177.3 ⁰	$42^{(-)}$	
23569.0 ^p	42^{+}	
25214.1 ⁰	$44^{(-)}$	
25516.5 <mark>P</mark>	44+	
27377.7 <mark>0</mark>	$46^{(-)}$	
27558.4 <mark>P</mark>	46+	
29661.5 ⁰	$48^{(-)}$	
29696.2 ^p	48^{+}	
31927.3 ^p	50^{+}	
32015.6 ⁰	$50^{(-)}$	
32082.6		
34244.4 ^p	52+	
34364.6 ⁰	(52-)	
34532.6		
36605.3 ^p	54+	
36806.60	(54 ⁻)	
38941.5P	56+	
39321.60	(56)	
$0.0+x^{9}$	(23)	Additional information 1.
1024 7 +	(25^{-})	E(level): no connection to any other levels is observed.
$1034.7 \pm x^{S}$	(23)	
$2104.2\pm x$ $3/53.0\pm x^{\$}$	(27) (20^{-})	
$4839.6 \pm x^{\$}$	(29^{-}) (31^{-})	
$6341 8 \pm x^{\$}$	(31^{-})	
$79447 + x^{\$}$	(35^{-})	
$9654.3 + x^{s}$	(37^{-})	
10255.8 + x	(2.)	
11477.6+x ^s	(39 ⁻)	
13417.2+x ^{\$}	(41^{-})	
15467.0+x ^s	(43-)	
17617.0+x ^{\$}	(45 ⁻)	
19853.8+x ^{\$}	(47 ⁻)	
22174.7+x ^{\$}	(49 ⁻)	
24599.1+x? ^{\$}	(51 ⁻)	
0.0+y ^r	(23^{+})	Additional information 2.
		E(level): no connection to any other levels is observed.

¹²⁶Xe Levels (continued)

E(level) [†]	Jπ‡
1156.4+y ^r	(25^{+})
2380.6+y ^r	(27^{+})
3673.3+y ^r	(29^+)
5043.4+y ^r	(31^+)
6488.3+y ^r	(33+)
8014.4+y ^r	(35 ⁺)
9624.1+y ^r	(37^{+})
11320.9+y ^r	(39+)
13107.6+y ^r	(41^+)
14984.8+y ^r	(43^{+})
16953.3+y ^r	(45^{+})
19004.1+y ^r	(47^{+})
21097.2+y ^r	(49+)
23226.6+y ^r	(51^+)
25414.0+y ^r	(53 ⁺)
27673.7+y ^r	(55^{+})
30018.2+y ^r	(57 ⁺)
32345.9+y? r	(59+)

[†] From least-squares fit to $E\gamma'$ s, assuming an uncertainty of 0.5 keV for each γ ray.

- [‡] From band structure and γ ray angular distribution ratio, unless where from Adopted Levels as noted.
- [#] From Adopted Levels.
- @ Band(A): BAND 1.
- & Band(B): BAND 2, GROUND-STATE BAND.
- ^a Band(C): BAND 3.
- ^b Band(D): BAND 4.
- ^c Band(E): BAND 5.
- ^d Band(F): BAND 8, SIGNATURE PARTNER OF BAND 9.
- ^e Band(G): BAND 9, SIGNATURE PARTNER OF BAND 8.
- ^{*f*} Band(H): BAND 10, (PI, α)=(-,1), SIGNATURE PARTNER OF BAND 11.
- ^g Band(I): BAND 11, (PI, α)=(-,0), SIGNATURE PARTNER OF BAND 10.
- ^h Band(j): BAND 12, SIGNATURE PARTNER OF BAND 13.
- ⁱ Band(J): BAND 13, SIGNATURE PARTNER OF BAND 12.
- ^j Band(K): BAND 14.
- ^k Band(L): BAND 15.
- ^l Band(M): BAND 16.
- ^{*m*} Band(n): BAND 17, (PI, α)=(-,1), SIGNATURE PARTNER OF BAND 18.
- ^{*n*} Band(N): BAND 18, (PI, α)=(-,0), SIGNATURE PARTNER OF BAND 17.
- ^o Band(O): BAND a, (PI, α)=(-,0), SIGNATURE PARTNER OF BAND d, Configuration= $\pi(g_{7/2}^2 \otimes h_{11/2}^2) \nu(i_{13/2} \otimes h_{11/2})$, Q(transition)=5.2 + 4 - 5 from DSAM.
- ^{*p*} Band(P): BAND b, (PI, α)=(+,0), SIGNATURE PARTNER OF BAND c, Configuration= $\pi(g_{7/2} \otimes h_{11/2}) \nu(i_{13/2} \otimes h_{11/2})$.
- ^q Band(Q): BAND b+, (PI, α)=(+,0).
- ^{*r*} Band(p): BAND c, (PI, α)=(+,1), SIGNATURE PARTNER OF BAND b, Configuration= $\pi(g_{7/2} \otimes h_{11/2}) \nu(i_{13/2} \otimes h_{11/2})$.
- ^s Band(o): BAND d, (PI, α)=(-,1), SIGNATURE PARTNER OF BAND a, Configuration= $\pi(g_{7/2}^2 \otimes h_{11/2}^2) \nu(i_{13/2} \otimes h_{11/2})$.

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

Eγ	Iγ	E _i (level)	\mathbf{J}_i^{π}	$\mathbf{E}_f = \mathbf{J}_f^{\pi}$	Mult. [†]	Comments
147 [‡]		6345.3	17^{-}	6198.2 (16 ⁻)		
166.4	6.97 23	2757.1	8-	2590.8 7-		
259.9	0.10 6	2561.8	6-	2301.9		
261.0	0.27 3	2561.8	6-	2300.5 5(-)		
265.7	1.30 7	6876.7	$17^{(+)}$	6611.1 16+	D(+Q)	$R_{\theta} = 0.71 \ 4.$
266 [‡]		3383.4	(9^{+})	3117.4 (8 ⁺)		
279.4	3.05 12	6876.7	$17^{(+)}$	6597.6 16+	D(+Q)	$R_{\theta} = 0.75 5.$
291.3	0.57 8	2590.8	7-	2300.5 5(-)		
292.0	3.63 16	7207.3	19-	6915.2 18 ⁽⁻⁾	D(+Q)	$R_{\theta} = 0.94 \ 8.$
296.1	0.16 6	5392.5	15^{-}	5096.6 14-		
306.1	7.10 22	3063.7	9-	2757.1 8-		
316.9	0.48 11	3197.5	(8-)	2880.6 7-		
325.2	0.43 8	4566.1	13-	4240.0 12-		
337.3	1.49 8	3783.0	11-	$3446.2 \ 10^{-10}$	D(O)	D 0.52 (
362.6	4.61 17	7615.8	19(+)	$7252.8 18^{(+)}$	D(+Q)	$R_{\theta} = 0.73$ 4.
369.0	0.48 9	7245.3	18	68/6.7 1/(1)	D(+Q)	$R_{\theta}=0.75$ 5.
370.9	0.64 5	7615.8	$19^{(+)}$	7245.3 18	D(+Q)	$R_{\theta}=0.75$ 5.
375.8	2.96 14	7252.8	18(1)	68/6.7 1/(1)	D(+Q)	$R_{\theta} = 0.73 \ 5.$
376+		1317.6	3+	942.0 4+		
376.0	1.25 10	2590.8	7=	2214.6 6^+		
376.5	0.82 13	2677.4	·/-	2300.5 5(-)		D 0 - 0 - 0
381.4	0.69 12	9750.7	$24^{(-)}$	9369.0 23	D(+Q)	$R_{\theta}=0.72$ 5.
382.2	3.94 10	3440.2	10 2+	3063.7 9	EO	D = 1.17 l
300.5	0 14 17	500.0 6345 3	∠ 17 [_]	5954 5	E2	$\mathbf{K} \theta = 1.17$ 1.
393.1	4 83 24	5726.2	15-	5333 2 14(-)	D(+0)	$R_{a}=0.92.7$
394.9	4 28 16	8433 5	$21^{(+)}$	8037.8 20 ⁽⁺⁾	D(+Q)	$R_0 = 0.72 + 1.$ $R_0 = 0.73 + 4.$
402.3	3 77 17	10910.0	$26^{(+)}$	$10508 \ 1 \ 25^{(+)}$	D(+Q)	$R_{\theta} = 0.76 \ 9$
407.0	0.20.8	10929.2	$26^{(-)}$	$10500.1 \ 25$ $10523 \ 8 \ 25^{-}$	D(1Q)	$F_{\rm ev}$: poor fit Level-energy difference=405.4
409.0	3 63 17	8165.5	21-	$77564 20^{(-)}$	D(+O)	$R_{a}=0.98 \ 10$
411	5.05 17	8645.7	$22^{(-)}$	8234.8 21-	$D(\mathbf{r},\mathbf{Q})$	Ng 0.9010.
413.2#	< 0.04	5923.4	16+	5508.9 16+		
414.0	6.6.3	3294.5	9-	$2880.6 7^{-}$	E2	$R_a=1.37$ 12.
415	0.0 0	1003.3	5+	$1488 4 4^+$		
416.2	< 0.01	3093.5	(8^{-})	$2677.4 7^{-}$		
418.6	0.75.7	9876 3	24+	9457 7 23 ⁽⁺⁾	D(+O)	$R_{a}=0.75.8$
422.4	3.96 1.5	8037.8	$20^{(+)}$	7615.8 19 ⁽⁺⁾	D(+Q)	$R_{a}=0.735$
138	000010	1317.6	3+	870 7 2+	2(12)	
456.6	1.43 11	4240.0	12^{-}	3783.0 11-		
458.4	1.80 10	9916.5	$24^{(+)}$	9457 7 23(+)	D(+O)	$R_{a}=0.68.15$
460.7	0.30 8	3218.1	(9^{-})	2757.1 8-	2(12)	
466 9 [#]	< 0.02	5090.5	14+	4619.4 14+		
467.0	0.30.10	2880.6	7-	$2413.6 5^{(-)}$		
469.5	0.55 11	12048.4	$28^{(-)}$	11579.1 27		
472.4	2.83 18	3063.7	9-	2590.8 7-		
474.2	0.80 9	3920.4		3446.2 10-		
480.1	3.01 15	8645.7	$22^{(-)}$	8165.5 21-	D(+Q)	R_{θ} =0.95 8.
491 [‡]		879.7	2^{+}	388.6 2+	-	
492.3	0.91 13	4732.3	13-	4240.0 12-		
492.8	0.79 19	9750.7	$24^{(-)}$	9257.8 23-		
493.8	4.44 18	8927.4	22^{+}	8433.5 21 ⁽⁺⁾	D(+Q)	R_{θ} =0.75 5.

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

Eγ	I_{γ}	E _i (level)	\mathbf{J}_i^{π}	$\mathbf{E}_f \qquad \mathbf{J}_f^{\pi}$	Mult. [†]	Comments
494 [‡] 521.0 524.4 530.0 530.5 531.7 540.6 541.2	5.18 25 14.0 6 0.54 8 2.66 12 0.52 21 5.4 4 0.59 23	4768.9 10929.2 3884.2 5096.6 9457.7 3093.5 3218.1 3759.4	$26^{(-)} \\ 12^{+} \\ 14^{-} \\ 23^{(+)} \\ (8^{-}) \\ (9^{-}) \\ (10^{-}) \\ 4^{+} $	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	D(+Q)	R_{θ} =0.78 8.
540 ⁴ 549.1 553.0 570.0 570.6 580.0 586 [‡]	8.6 4 93 3 19.4 7 13.7 6 2.8 4	1488.4 7756.4 942.0 6915.2 3884.2 3874.5 1903.3	$ \begin{array}{c} 4^{+} \\ 20^{(-)} \\ 4^{+} \\ 18^{(-)} \\ 12^{+} \\ (10^{-}) \\ 5^{+} \end{array} $	942.0 4^{+} 7207.3 19^{-} 388.6 2^{+} 6345.3 17^{-} 3313.8 10^{+} 3294.5 9^{-} 1317.6 3^{+}	D(+Q) E2 D(+Q) E2	$R_{\theta}=0.69$ 2. $R_{\theta}=1.27$ 2. $R_{\theta}=0.71$ 2. $R_{\theta}=1.42$ 4.
589.6 592.0 596.7 600.8 609^{\ddagger} 612.1 615^{\ddagger}	0.24 <i>5</i> 0.61 <i>26</i> 0.30 <i>12</i> 2.02 <i>19</i> 6.3 <i>3</i>	5954.5 10508.1 5333.2 5333.2 1488.4 9257.8 3998.5	25 ⁽⁺⁾ 14 ⁽⁻⁾ 14 ⁽⁻⁾ 4 ⁺ 23 ⁻	$\begin{array}{cccc} 5365.0 & (14^{-}) \\ 9916.5 & 24^{(+)} \\ 4736.4 & 13^{-} \\ 4732.3 & 13^{-} \\ 879.7 & 2^{+} \\ 8645.7 & 22^{(-)} \\ 3383.4 & (9^{+}) \end{array}$		
617.1 619.2 620.0 [#] 620.4	2.89 22 20.5 8 <0.03 3.4 5	3294.5 6345.3 6012.6 11530.4	9 ⁻ 17 ⁻ 16 ⁻ (27 ⁺)	$2677.4 7^{-}$ $5726.2 15^{-}$ $5392.5 15^{-}$ $10910.0 26^{(+)}$	E2	$R_{\theta} = 1.39 \ 5.$ $R_{\theta} = 0.85 \ 7.$
621.1 628.4 632.8 640 [‡] 650.0 657.1 658.8 666.1	6.0 6 1.22 21 0.96 19 <0.03 0.59 16 0.21 3 0.45 24	5954.5 3063.7 4596.2 3998.5 11579.1 10408.0 2561.8 3759.4	9^{-} (12 ⁻) 27^{-} 25^{-} 6^{-} (10 ⁻)	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		
669.0 670.3 [#] 677.0 682 [‡]	6.0 6 <0.01 0.72 9	3963.5 2301.9 3874.5 3117.4	(10^{-}) (10^{-}) (8^{+}) 10^{-}	$\begin{array}{c} 3294.5 & 9^{-} \\ 1634.9 & 6^{+} \\ 3197.5 & (8^{-}) \\ 2435.3 & 8^{+} \\ 2757.1 & 8^{-} \end{array}$	E2	$R_{\theta} = 1.35 \ I2.$
690.1 692.8 702.1 718.7 721.7 722.‡	5.96 25 79.8 25 6.0 5 8.7 3 2.23 21	3440.2 1634.9 3920.4 3783.0 4596.2 3383.4	$10 \\ 6^+$ $11^- (12^-) \\ (9^+)$	$\begin{array}{c} 2757.1 & 8 \\ 942.0 & 4^{+} \\ 3218.1 & (9^{-}) \\ 3063.7 & 9^{-} \\ 3874.5 & (10^{-}) \\ 2661.3 & 7^{+} \end{array}$	E2	$R_{\theta} = 1.33 \ 2.$
726 [‡] 734.8 737.0	27.7 <i>10</i> 2.3 <i>4</i>	2214.6 4619.4 5333.2	6^+ 14 ⁺ 14 ⁽⁻⁾	1488.4 4 ⁺ 3884.2 12 ⁺ 4596.2 (12 ⁻)	E2	$R_{\theta} = 1.45 \ 6.$
739.4 749.8 758 [‡]	1.82 <i>12</i> 0.53 <i>22</i>	7615.8 11677.9 2661.3	19 ⁽⁺⁾ 27 ⁻ 7 ⁺	$\begin{array}{rrrr} 6876.7 & 17^{(+)} \\ 10929.2 & 26^{(-)} \\ 1903.3 & 5^+ \end{array}$	E2	$R_{\theta} = 1.40 \ 9.$
762.1	< 0.05	3197.5	(8 ⁻)	2435.3 8+		

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

$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Eγ	Iγ	E _i (level)	\mathbf{J}_i^{π}	\mathbf{E}_{f}	\mathbf{J}_f^{π}	Mult. [†]	Comments
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	771‡		4768.9		3998.5			
773.0 5.1 4 473.6, 4 13 396.3.5, 11 E2 $R_p=1.41$ $I0.$ 783.1 0.46 321.8.1 $(0^{})$ 243.5.8 * $R_{0}=1.36$ $R_{0}=1.36$ $R_{0}=1.36$ $R_{0}=1.36$ $R_{0}=1.36$ $R_{0}=1.36$ $R_{0}=1.36$ $R_{0}=1.39$ $R_{0}=1.41$ $R_{0}=1.42$ </td <td>772.0</td> <td>0.41 7</td> <td>4531.4</td> <td>(12^{-})</td> <td>3759.4</td> <td>(10^{-})</td> <td></td> <td></td>	772.0	0.41 7	4531.4	(12^{-})	3759.4	(10^{-})		
783.1 10.4 6 3218.1 (9') 2435.3 8'' 785.2 6.6 4566.1 13'' 3783.0 11'' E2 $R_9=1.36.5$. 785.0 0.73 0.73 4.74 4240.0 12'' 4462.10'' E2 $R_9=1.39.8$. 800.7 0.08 4 533.2 14'' 451.4 (12'') E2 $R_9=1.39.4$. 811.8 3.7.3 4732.3 13''' 392.4 E2 $R_9=1.39.4$. 816.1 0.62.17 4736.4 13''' 392.4 E2 $R_9=1.42.12$. 817.8 1.61.17 8433.5 21''' 7615.8 19'''' E2 $R_9=1.43.75$. 837.8 0.44 5923.4 16'' 5090.5 14''' E2 $R_9=1.42.12$. 841.1 9.5.4 7756.4 20''' 611.5 E2 $R_9=1.42.12$. 847 ² 3061.6 8''' 2214.6 6'' 22 $R_9=1.42.7$. 850.1 12.3 57'' E2 $R_9=1.39.6$. $R_9=1.42.7$. 860.3 <t< td=""><td>773.0</td><td>5.1 4</td><td>4736.4</td><td>13-</td><td>3963.5</td><td>11-</td><td>E2</td><td>$R_{\theta} = 1.41 \ IO.$</td></t<>	773.0	5.1 4	4736.4	13-	3963.5	11-	E2	$R_{\theta} = 1.41 \ IO.$
TA3.2 6.6.3 4 360.1 13 378.30 11 E2 Reg=1.36 S. 793.9 1.84 14 4240.0 12 3446.2 10 E2 Reg=1.39 S. 801.7 0.68 18 2353.3 8* 163.49 6* E2 Reg=1.39 S. 816.1 0.62 17 4736.4 13 3290.4 E2 Reg=1.39 I. 816.3 0.72 13 5005.5 14* 4274.2 12* E2 Reg=1.41 I.6. 82.8 0.44 523.4 16* 7005.5 14* E2 Reg=1.42 I.2 83.7 0.29 S 5365.0 14* 127.4 E2 Reg=1.41 S. 847 ⁵ 3061.6 8* 221.46 6* 850.4 17 532.5 F2 Reg=1.42 I.2 850.4 10.5 532.3 9* 2661.3 7* 80.2 16* 6* 850.4 12.3 5 700.73 19 6453.3 17 E2 Reg=1.42 T. 865.0 1.4.5 5 700.73 19 6454.5	783.1	10.4 6	3218.1	(9-)	2435.3	8+		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	783.2	6.6 3	4566.1	13^{-}	3783.0	11-	E2	$R_{\theta} = 1.36 5.$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	785.0	0.73 6	8037.8	$20^{(+)}$	7252.8	18(+)	50	D 120.0
a) 30.8 10 23.3.8 14 ⁽⁻⁾ 453.4 (12 ⁻⁾ B11.8 3.7.3 4732.3 13 ⁻ 3920.4 B11.8 3.7.3 4732.3 13 ⁻ 3920.4 B16.1 0.62 17 4736.4 13 ⁻ 3920.4 B16.3 0.72 13 5090.5 14 ⁺ 4274.2 12 ⁺ E2 Rg=1.39 10. B17.8 1.61 1.7 843.3 21(⁺) 75.8 16 ⁺ E2 Rg=1.41 16. S22.8 0.4 5923.4 16 ⁺ 500.5 14 ⁺ E2 Rg=1.42 12. S33.7 0.29 8 5365.0 (14 ⁻¹) 4531.4 (12 ⁻) Rg=1.42 12. S41.1 9.54 7756.4 20 ⁻⁰ 6915.2 18 ¹⁻⁰ E2 Rg=1.42 7. S65.0 10.0.5 6248.4 17 ⁻ 5325.3 15 ⁻ E2 Rg=1.42 7. S65.0 1.4.5 6198.2 16 ⁻¹⁰ 13 ⁻¹⁰ 14 ⁻¹⁰ 14 ⁻¹⁰ S89.1 29.1.10 5508.9 16 ⁺¹ 4619.4 14 ⁺¹ E2 Rg=1.40 7. 890.3	/93.9	1.84 14	4240.0	12 0+	3446.2	10 4	E2 E2	$R_{\theta} = 1.39 \ \delta.$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	800.7 801 7	30.8 10	2433.3 5222.0	$\frac{0}{14(-)}$	1054.9	(12-)	EZ	$R_{\theta} = 1.39$ 4.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	801.7 811.8	0.084	2222.2 1722.3	14	4331.4	(12)		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	816.1	0.62.17	4736.4	13-	3920.4			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	816.3	0.72.13	5090.5	14^{+}	4274.2	12^{+}	E2	$R_a = 1.39 \ 10$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	817.8	1.61 17	8433.5	$21^{(+)}$	7615.8	19(+)	E2	$R_a = 1.41 I G$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	826.2	8.2.3	5392.5	15^{-}	4566.1	13-	E2	$R_a=1.37.5.$
8337 0.29 8 5365.0 (14 ⁻⁷) 4531.4 (12 ⁻⁷) 841.1 9.5 4 7756.4 20 ⁽⁻⁷⁾ 6915.2 18 ⁽⁻⁷⁾ E2 R_{g} =1.41 8. 847 ⁴ 3061.6 8 ⁺ 2214.6 6 ⁺ 856.0 10.0 5 6248.4 17 ⁻ 5392.5 15 ⁻ E2 R_{g} =1.39 6. 857.4 1.6 3 509.6 14 ⁻ 4240.0 12 ⁻ E2 R_{g} =1.40 10. 859 [‡] 3520.3 9 ⁺ 2661.3 7 ⁺ 862.0 12.3 5 7207.3 19 ⁻ 6345.3 17 ⁻ E2 R_{g} =1.42 7. 865.0 1.4 5 6198.2 (16 ⁻⁷) 5335.2 14 ⁽⁻⁷⁾ 878.3 25.5 9 3313.8 10 ⁺ 2435.3 8 ⁺ E2 R_{g} =1.42 7. 889.1 29.1 10 5508.9 16 ⁺ 4619.4 14 ⁺ E2 R_{g} =1.42 7. 889.1 29.1 10 5508.9 16 ⁺ 4619.4 14 ⁺ E2 R_{g} =1.40 7. 890.3 0.57 25 6255.3 (16 ⁻⁷) 5365.0 (14 ⁻⁷) 890.3 0.57 25 6255.3 (16 ⁻⁷) 5365.0 (14 ⁻⁷) 890.7 0.68 11 892.7 4 22 ⁺ 8037.8 20 ⁽⁺⁾ 913.0 0.20 12 7039.2 18 ⁺ 6126.2 16 ⁺ E2 R_{g} =1.40 20. 915.1 3.0 3 4274.2 12 ⁺ 3303.8 4 ⁺ E2 R_{g} =1.40 20. 915.1 3.0 3 4274.2 12 ⁺ 3305.9 10 ⁺ 4768.9 929 [‡] 1317.6 3 ⁺ 388.6 2 ⁺ 929 [‡] 1317.6 3 ⁺ 388.6 2 ⁺ 949.3 0.69 1/2 9876.3 24 ⁺ 8927.4 22 ⁺ E2 R_{g} =1.39 1. 948.1 1.7 6 2501.8 6 ⁻ 1634.9 6 ⁺ 929 [‡] 1317.6 3 ⁺ 388.6 2 ⁺ 949.3 0.69 1/2 9876.3 24 ⁺ 8927.4 22 ⁺ E2 R_{g} =1.41 4.7. 948.1 1.7 6 2501.8 7 ⁻ 1634.9 6 ⁺ 958.1 1.7 6 2501.8 7 ⁻ 1634.9 6 ⁺ 959.3 7.185.0 19 ⁻ 6248.4 17 ⁻ E2 R_{g} =1.37 7. 948. [‡] 3333.4 (9 ⁺) 2435.3 8 ⁺ 949.3 0.69 1/2 9876.3 24 ⁺ 8927.4 22 ⁺ E2 R_{g} =1.42 17. 958.1 4.2 3 8165.5 21 ⁻ 7207.3 19 ⁻ E2 R_{g} =1.42 7. 960.6 <0.03 6915.2 18 ⁽⁻¹⁾ 5954.5 97.1 4.2 4.2 8165.5 21 ⁻ 7207.3 19 ⁻ E2 R_{g} =1.40 20. 96.1 2.58 25 4274.2 12 ⁺ 3313.8 10 ⁺ E2 R_{g} =1.40 20. 96.1 2.58 25 4274.2 12 ⁺ 3313.8 10 ⁺ E2 R_{g} =1.40 7. 96.1 10.3 15 8015. 20 ⁺ 7039.2 18 ⁺ E2 R_{g} =1.40 13. 97.40 0.30 15 8015. 20 ⁺ 7039.2 18 ⁺ E2 R_{g} =1.40 13. 98.3 0.63 10 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ 98.9 3.05 20 5726.2 15 ⁺ 4736.4 13 ⁻ E2 R_{g} =1.40 13. 98.9 3.05 20 5726.2 15 ⁺ 4736.4 13 ⁻ E2 R_{g} =1.38 18. 99.3 9.15 5264.2 15 ⁺ 4736.4 13 ⁻ E2 R_{g}	832.8	0.4 4	5923.4	16+	5090.5	14+	E2	$R_{\theta} = 1.42 \ I2.$
	833.7	0.29 8	5365.0	(14^{-})	4531.4	(12^{-})		0
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	841.1	9.5 4	7756.4	$20^{(-)}$	6915.2	$18^{(-)}$	E2	$R_{\theta} = 1.41 \ 8.$
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	847 [‡]		3061.6	8+	2214.6	6+		
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	856.0	10.0 5	6248.4	17^{-}	5392.5	15-	E2	$R_{\theta} = 1.39 \ 6.$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	857.4	1.6 <i>3</i>	5096.6	14-	4240.0	12-	E2	$R_{\theta} = 1.40 \ 10.$
862.0 12.3 5 7207.3 19 ⁻ 6345.3 17 ⁻ E2 R_{g} =1.42 7. 865.0 1.4 5 6198.2 (16 ⁻) 533.2 14 ⁽⁻⁾ 878.3 25.5 9 313.8 10 ⁺ 2435.3 8 ⁺ E2 R_{g} =1.39 4. 880 [‡] 879.7 2 ⁺ 0.0 0 ⁺ 889.1 29.1 10 5508.9 16 ⁺ 4619.4 14 ⁺ E2 R_{g} =1.42 4. 889.2 12.8 6 8645.7 22 ⁽⁻⁾ 775.6 4 20 ⁽⁻⁾ E2 R_{g} =1.40 7. 890.3 0.57 25 6255.3 (16 ⁻⁾ 5365.0 (14 ⁻) 890.7 0.68 11 8927.4 22 ⁺ 8037.8 20 ⁽⁺⁾ 913.0 0.20 12 7039.2 18 ⁺ 6126.2 16 ⁺ E2 R_{g} =1.40 20. 915.1 3.0 3 4274.2 12 ⁺ 3359.2 10 ⁺ E2 R_{g} =1.49 4. 916.0 1.44 2 6012.6 16 ⁻ 5096.6 14 ⁻ E2 R_{g} =1.39 4. 926. [‡] 5694.9 4768.9 927.1 [#] <0.01 2561.8 6 ⁻ 1634.9 6 ⁺ 929. [‡] 1317.6 3 ⁺ 388.6 2 ⁺ 936.8 5.9 3 7185.0 19 ⁻ 6248.4 17 ⁻ E2 R_{g} =1.37 7. 948. [‡] 3383.4 (9 ⁺) 2435.3 8 ⁺ 949.3 0.69 12 9876.3 24 ⁺ 8927.4 22 ⁺ E2 R_{g} =1.47 18. 954.8 11.7 6 2590.8 7 ⁻ 1634.9 6 ⁺ E1 R_{g} =0.97 3. Mult: from $\gamma(\theta)$ and $\gamma(\text{pol})$ in (α,ny) . 958.1 4.2 3 8165.5 21 ⁻ 7207.3 19 ⁻ E2 R_{g} =1.39 15. 958.6 2.37 21 7207.3 19 ⁻ 6248.4 17 ⁻ E2 R_{g} =1.49 20. 958.1 4.2 3 8165.5 21 ⁻ 7207.3 19 ⁻ E2 R_{g} =1.49 20. 958.1 4.2 3 8165.5 21 ⁻ 7207.3 19 ⁻ E2 R_{g} =1.40 20. 960.1 2.58 25 4274.2 12 ⁺ 3313.8 10 ⁺ E2 R_{g} =1.40 20. 960.6 <0.03 6915.2 18 ⁽⁻⁾ 5954.5 961. [‡] 1903.3 5 ⁺ 942.0 4 ⁺ 969.0 1.02 19 6981.6 18 ⁻ 6012.6 16 ⁻ E2 R_{g} =1.40 13. 974.0 0.30 175 801.35 20 ⁺ 7039.2 18 ⁺ E2 R_{g} =1.40 13. 989.3 0.63 10 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ E2 R_{g} =1.40 13. 989.3 0.63 10 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ 989.9 3.0520 5726.2 15 ⁻ 7736.4 13 ⁻ E2 R_{g} =1.42 9.	859 [‡]		3520.3	9+	2661.3	7+		
865.0 1.4 5 6198.2 (16 ⁻) 5333.2 14 ⁽⁻⁾ 878.3 25.5 9 3313.8 10 ⁺ 2435.3 8 ⁺ E2 R_{θ} =1.39 4. 880 [‡] 879.7 2 ⁺ 0.0 0 ⁺ 889.1 29.1 10 5508.9 16 ⁺ 4619.4 14 ⁺ E2 R_{θ} =1.42 4. 889.2 12.8 6 8645.7 22 ⁽⁻⁾ 7756.4 20 ⁽⁻⁾ E2 R_{θ} =1.40 7. 890.3 0.57 25 6255.3 (16 ⁻) 5365.0 (14 ⁻) 913.0 0.20 12 7039.2 18 ⁺ 6126.2 16 ⁺ E2 R_{θ} =1.40 20. 915.1 3.0 3 4274.2 12 ⁺ 3359.2 10 ⁺ E2 R_{θ} =1.40 20. 915.1 3.0 3 4274.2 12 ⁺ 3359.2 10 ⁺ E2 R_{θ} =1.39 12. 924.2 22.4 8 3359.2 10 ⁺ 2435.3 8 ⁺ E2 R_{θ} =1.39 12. 924.2 22.4 8 3359.2 10 ⁺ 2435.3 8 ⁺ E2 R_{θ} =1.39 14. 926 [‡] 5694.9 4768.9 927.1 [#] <0.01 2561.8 6 ⁻ 1634.9 6 ⁺ 929 [‡] 1317.6 3 ⁺ 388.6 2 ⁺ 936.8 5.9 3 7185.0 19 ⁻ 6248.4 17 ⁻ E2 R_{θ} =1.37 7. 948 [‡] 3383.4 (9 ⁺) 2435.3 8 ⁺ 949.3 0.69 12 9876.3 24 ⁺ 8927.4 22 ⁺ E2 R_{θ} =1.44 18. 954.8 11.7 6 2590.8 7 ⁻ 1634.9 6 ⁺ E1 R_{θ} =0.97 3. Mult: from $\gamma(\theta)$ and $\gamma(\text{pol})$ in (α,ny). 958.1 4.2 3 8165.5 21 ⁻ 7207.3 19 ⁻ E2 R_{θ} =1.39 15. 958.6 2.37 21 7207.3 19 ⁻ 6248.4 17 ⁻ E2 R_{θ} =1.40 20. 958.6 2.37 21 7207.3 19 ⁻ 6248.4 17 ⁻ E2 R_{θ} =1.40 20. 958.6 2.37 21 7207.3 19 ⁻ 6248.4 17 ⁻ E2 R_{θ} =1.40 20. 958.6 2.37 21 7207.3 19 ⁻ 6248.4 17 ⁻ E2 R_{θ} =1.49 0. 958.6 2.37 21 7207.3 19 ⁻ 6248.4 17 ⁻ E2 R_{θ} =1.40 20. 960.1 2.58 25 4274.2 12 ⁺ 3313.8 10 ⁺ E2 R_{θ} =1.40 20. 960.6 <0.03 6915.2 18 ⁽⁻⁾ 5954.5 961 [‡] 1903.3 5 ⁺ 942.0 4 ⁺ 969.0 1.02 19 6981.6 18 ⁻ 6012.6 16 ⁻ E2 R_{θ} =1.40 13. 974.0 0.30 15 8013.5 20 ⁺ 7039.2 18 ⁺ E2 R_{θ} =1.40 13. 989.3 0.63 10 9916.5 24 ⁺ 8927.4 22 ⁺ 899.9 3.0520 5726.2 15 ⁻ 4736.4 13 ⁻ E2 R_{θ} =1.42 9.	862.0	12.3 5	7207.3	19-	6345.3	17-	E2	$R_{\theta} = 1.42$ 7.
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	865.0	1.4 5	6198.2	(16 ⁻)	5333.2	$14^{(-)}$		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	878.3	25.5 9	3313.8	10^{+}	2435.3	8+	E2	R_{θ} =1.39 4.
889.129.1 105508.916+4619.414+E2 $R_{\theta}=1.42 \ 4.$ 889.212.8 68645.722(-)7756.420(-)E2 $R_{\theta}=1.40 \ 7.$ 890.30.57 256255.3(16^-)5365.0(14^-)913.00.20 127039.218+6126.216+E2 $R_{\theta}=1.40 \ 20.$ 915.13.0 34274.212+3359.210+E2 $R_{\theta}=1.39 \ 12.$ 924.222.4 83359.210+2435.38+E2 $R_{\theta}=1.39 \ 4.$ 926‡5694.94768.9927.1‡<0.01	880 [‡]		879.7	2^{+}	0.0	0^{+}		
889.212.8 68645.722(-)7756.420(-)E2 $R_{\theta}=1.40$ 7.890.30.57 256255.3(16 ⁻)5365.0(14 ⁻)5365.0(14 ⁻)913.00.20 127039.212 ⁺ 8037.820(+)8037.820(+)915.13.0 34274.212 ⁺ 3359.210 ⁺ E2 $R_{\theta}=1.40$ 20.915.13.0 34274.212 ⁺ 3359.210 ⁺ E2 $R_{\theta}=1.39$ 12.924.222.4 83359.210 ⁺ 2435.38 ⁺ E2 $R_{\theta}=1.39$ 4.926 [‡] 5694.94768.94768.9927.1 [#] <0.01	889.1	29.1 10	5508.9	16+	4619.4	14+	E2	$R_{\theta} = 1.42 \ 4.$
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	889.2	12.8 6	8645.7	$22^{(-)}$	7756.4	$20^{(-)}$	E2	$R_{\theta} = 1.40$ 7.
890.7 0.68 <i>II</i> 8927.4 22 ⁺ 8037.8 20 ⁽⁺⁾ 913.0 0.20 <i>I</i> 2 7039.2 18 ⁺ 6126.2 16 ⁺ E2 R _θ =1.40 20. 915.1 3.0.3 4274.2 12 ⁺ 3359.2 10 ⁺ E2 R _θ =1.39 <i>I</i> 2. 924.2 22.4.8 3359.2 10 ⁺ 2435.3 8 ⁺ E2 R _θ =1.39 <i>I</i> . 926 [‡] 5694.9 4768.9 927.1 [#] <0.01 2561.8 6 ⁻ 1634.9 6 ⁺ 929 [‡] 1317.6 3 ⁺ 388.6 2 ⁺ 936.8 5.9.3 7185.0 19 ⁻ 6248.4 17 ⁻ E2 R _θ =1.37 7. 948 [‡] 3383.4 (9 ⁺) 2435.3 8 ⁺ 949.3 0.69 <i>I</i> 2 9876.3 24 ⁺ 8927.4 22 ⁺ E2 R _θ =1.44 <i>I</i> 8. 954.8 11.7 6 2590.8 7 ⁻ 1634.9 6 ⁺ E1 R _θ =0.97 3. Mult: from $\gamma(\theta)$ and $\gamma(\text{pol})$ in (α, ny) . 958.1 4.2.3 8165.5 21 ⁻ 7207.3 19 ⁻ E2 R _θ =1.40 20. 960.1 2.58 25 4274.2 12 ⁺ 3313.8 10 ⁺ E2 R _θ =1.40 20. 960.6 <0.03 6915.2 18 ⁽⁻⁾ 5954.5 961 [‡] 1903.3 5 ⁺ 942.0 4 ⁺ 969.0 1.02 <i>I</i> 9 6981.6 18 ⁻ 6012.6 16 ⁻ E2 R _θ =1.40 <i>I</i> 3. 974.0 0.30 <i>I</i> 5 8013.5 20 ⁺ 7039.2 18 ⁺ E2 R _θ =1.40 <i>I</i> 3. 974.0 0.30 <i>I</i> 5 8013.5 20 ⁺ 7039.2 18 ⁺ E2 R _θ =1.42 <i>I</i> 8. 989.3 0.63 <i>I</i> 0 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ E2 R _θ =1.40 <i>I</i> 3. 989.3 0.63 <i>I</i> 0 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ E2 R _θ =1.40 <i>I</i> 3. 989.3 0.63 <i>I</i> 0 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ E2 R _θ =1.40 <i>I</i> 3. 989.3 0.520 5726.2 15 ⁻ 4736.4 13 ⁻ E2 R _θ =1.42 <i>P</i> .	890.3	0.57 25	6255.3	(16 ⁻)	5365.0	(14 ⁻)		
913.0 0.20 12 7039.2 18 ⁺ 6126.2 16 ⁺ E2 R_{θ} =1.40 20. 915.1 3.0 3 4274.2 12 ⁺ 3359.2 10 ⁺ E2 R_{θ} =1.41 4. 916.0 1.44 2 6012.6 16 ⁻ 5096.6 14 ⁻ E2 R_{θ} =1.39 12. 924.2 22.4 8 3359.2 10 ⁺ 2435.3 8 ⁺ E2 R_{θ} =1.39 4. 926 [‡] 5694.9 4768.9 927.1 [#] <0.01 2561.8 6 ⁻ 1634.9 6 ⁺ 929 [‡] 1317.6 3 ⁺ 388.6 2 ⁺ 936.8 5.9 3 7185.0 19 ⁻ 6248.4 17 ⁻ E2 R_{θ} =1.37 7. 948 [‡] 3383.4 (9 ⁺) 2435.3 8 ⁺ 949.3 0.69 12 9876.3 24 ⁺ 8927.4 22 ⁺ E2 R_{θ} =1.44 18. 954.8 11.7 6 2590.8 7 ⁻ 1634.9 6 ⁺ E1 R_{θ} =0.97 3. Mult: from $\gamma(\theta)$ and $\gamma(\text{pol})$ in (α,ny). 958.1 4.2 3 8165.5 21 ⁻ 7207.3 19 ⁻ E2 R_{θ} =1.39 15. 958.6 2.37 21 7207.3 19 ⁻ 6248.4 17 ⁻ E2 R_{θ} =1.40 20. 960.1 2.58 25 4274.2 12 ⁺ 3313.8 10 ⁺ E2 R_{θ} =1.40 20. 960.6 <0.03 6915.2 18 ⁽⁻⁾ 5954.5 961 [‡] 1903.3 5 ⁺ 942.0 4 ⁺ 969.0 1.02 19 6981.6 18 ⁻ 6012.6 16 ⁻ E2 R_{θ} =1.40 13. 974.0 0.30 15 8013.5 20 ⁺ 7039.2 18 ⁺ E2 R_{θ} =1.40 13. 974.0 0.30 15 8013.5 20 ⁺ 7039.2 18 ⁺ E2 R_{θ} =1.42 9.	890.7	0.68 11	8927.4	22+	8037.8	20(+)		
915.1 5.0 3 42/4.2 12' 3359.2 10' E2 $R_{\theta}=1.414$. 916.0 1.44 2 6012.6 16 ⁻ 5096.6 14 ⁻ E2 $R_{\theta}=1.39$ <i>I</i> 2. 924.2 22.4 8 3359.2 10 ⁺ 2435.3 8 ⁺ E2 $R_{\theta}=1.39$ <i>I</i> . 926 [‡] 5694.9 4768.9 927.1 [#] <0.01 2561.8 6 ⁻ 1634.9 6 ⁺ 936.8 5.9 3 7185.0 19 ⁻ 6248.4 17 ⁻ E2 $R_{\theta}=1.37$ 7. 948 [‡] 3383.4 (9 ⁺) 2435.3 8 ⁺ 949.3 0.69 <i>I</i> 2 9876.3 24 ⁺ 8927.4 22 ⁺ E2 $R_{\theta}=1.44$ <i>I</i> 8. 954.8 11.7 6 2590.8 7 ⁻ 1634.9 6 ⁺ E1 $R_{\theta}=0.97$ 3. Mult: from $\gamma(\theta)$ and $\gamma(\text{pol})$ in ($\alpha, n\gamma$). 958.1 4.2 3 8165.5 21 ⁻ 7207.3 19 ⁻ E2 $R_{\theta}=1.40$ 20. 960.1 2.58 25 4274.2 12 ⁺ 3313.8 10 ⁺ E2 $R_{\theta}=1.40$ 20. 960.6 <0.03 6915.2 18 ⁽⁻⁾ 5954.5 961 [‡] 1903.3 5 ⁺ 942.0 4 ⁺ 969.0 1.02 <i>I</i> 9 6981.6 18 ⁻ 6012.6 16 ⁻ E2 $R_{\theta}=1.40$ <i>I</i> 3. 974.0 0.30 <i>I</i> 5 8013.5 20 ⁺ 7039.2 18 ⁺ E2 $R_{\theta}=1.40$ <i>I</i> 3. 989.3 0.63 <i>I</i> 0 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ 889.9 3.05 20 5726.2 15 ⁻ 4736.4 13 ⁻ E2 $R_{\theta}=1.38$ <i>I</i> 8. 990.3 9.15 5264.2 14 ⁺ 4274.2 12 ⁺ E2 $R_{\theta}=1.38$ <i>I</i> 8. 990.3 9.15 5264.2 14 ⁺ 4274.2 12 ⁺ E2 $R_{\theta}=1.42$ 9.	913.0	0.20 12	7039.2	18+	6126.2	16 ⁺	E2	$R_{\theta} = 1.40 \ 20.$
910.0 1.44 2 0012.6 16 5090.6 14 E2 $R_{\theta}=1.39$ 12. 924.2 22.4 8 3359.2 10 ⁺ 2435.3 8 ⁺ E2 $R_{\theta}=1.39$ 4. 926 [‡] 5694.9 4768.9 927.1 [#] <0.01 2561.8 6 ⁻ 1634.9 6 ⁺ 929 [‡] 1317.6 3 ⁺ 388.6 2 ⁺ 936.8 5.9 3 7185.0 19 ⁻ 6248.4 17 ⁻ E2 $R_{\theta}=1.37$ 7. 948 [‡] 3383.4 (9 ⁺) 2435.3 8 ⁺ 949.3 0.69 12 9876.3 24 ⁺ 8927.4 22 ⁺ E2 $R_{\theta}=1.44$ 18. 954.8 11.7 6 2590.8 7 ⁻ 1634.9 6 ⁺ E1 $R_{\theta}=0.97$ 3. Mult: from $\gamma(\theta)$ and $\gamma(\text{pol})$ in $(\alpha, n\gamma)$. 958.1 4.2 3 8165.5 21 ⁻ 7207.3 19 ⁻ E2 $R_{\theta}=1.49$ 15. 958.6 2.37 21 7207.3 19 ⁻ 6248.4 17 ⁻ E2 $R_{\theta}=1.40$ 20. 960.1 2.58 25 4274.2 12 ⁺ 3313.8 10 ⁺ E2 $R_{\theta}=1.42$ 7. 960.6 <0.03 6915.2 18 ⁽⁻⁾ 5954.5 961 [‡] 1903.3 5 ⁺ 942.0 4 ⁺ 969.0 1.02 19 6981.6 18 ⁻ 6012.6 16 ⁻ E2 $R_{\theta}=1.40$ 13. 974.0 0.30 15 8013.5 20 ⁺ 7039.2 18 ⁺ E2 $R_{\theta}=1.40$ 13. 989.3 0.63 10 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ 989.9 3.05 20 5726.2 15 ⁻ 4736.4 13 ⁻ E2 $R_{\theta}=1.38$ 18. 990.3 9.1 5 5264.2 14 ⁺ 4274.2 12 ⁺ E2 $R_{\theta}=1.42$ 9.	915.1	3.0 3	42/4.2	12	3359.2	10'	E2 E2	$R_{\theta} = 1.414.$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	910.0	$1.44 \ 2$	0012.0 3350.2	10 10 ⁺	2090.0 2435 3	14 0+	EZ E2	$R_{\theta} = 1.39 \ I2.$
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	026	22.4 0	5559.2	10	4769.0	0	L2	$R_{\theta} = 1.35 + .$
$\begin{array}{llllllllllllllllllllllllllllllllllll$	920 [•]	0.04	3094.9	<i>i</i> –	4/08.9	< ±		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	927.1"	< 0.01	2561.8	6-	1634.9	6		
936.8 5.9 3 7185.0 19 ⁻ 6248.4 17 ⁻ E2 $R_{\theta}=1.37$ 7. 948 [‡] 3383.4 (9 ⁺) 2435.3 8 ⁺ 949.3 0.69 12 9876.3 24 ⁺ 8927.4 22 ⁺ E2 $R_{\theta}=1.44$ 18. 954.8 11.7 6 2590.8 7 ⁻ 1634.9 6 ⁺ E1 $R_{\theta}=0.97$ 3. Mult.: from $\gamma(\theta)$ and $\gamma(\text{pol})$ in $(\alpha, n\gamma)$. 958.1 4.2 3 8165.5 21 ⁻ 7207.3 19 ⁻ E2 $R_{\theta}=1.39$ 15. 958.6 2.37 21 7207.3 19 ⁻ 6248.4 17 ⁻ E2 $R_{\theta}=1.40$ 20. 960.1 2.58 25 4274.2 12 ⁺ 3313.8 10 ⁺ E2 $R_{\theta}=1.42$ 7. 960.6 <0.03 6915.2 18 ⁽⁻⁾ 5954.5 961 [‡] 1903.3 5 ⁺ 942.0 4 ⁺ 969.0 1.02 19 6981.6 18 ⁻ 6012.6 16 ⁻ E2 $R_{\theta}=1.40$ 13. 974.0 0.30 15 8013.5 20 ⁺ 7039.2 18 ⁺ E2 $R_{\theta}=1.40$ 13. 989.3 0.63 10 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ 989.9 3.05 20 5726.2 15 ⁻ 4736.4 13 ⁻ E2 $R_{\theta}=1.38$ 18. 990.3 9.1 5 5264.2 14 ⁺ 4274.2 12 ⁺ E2 $R_{\theta}=1.42$ 9.	929 +		1317.6	3+	388.6	2+		
$\begin{array}{llllllllllllllllllllllllllllllllllll$	936.8	5.9 3	7185.0	19-	6248.4	17-	E2	$R_{\theta} = 1.37$ 7.
949.3 0.69 12 9876.3 24 ⁺ 8927.4 22 ⁺ E2 $R_{\theta}=1.44$ 18. 954.8 11.7 6 2590.8 7 ⁻ 1634.9 6 ⁺ E1 $R_{\theta}=0.97$ 3. Mult.: from $\gamma(\theta)$ and $\gamma(\text{pol})$ in $(\alpha, n\gamma)$. 958.1 4.2 3 8165.5 21 ⁻ 7207.3 19 ⁻ E2 $R_{\theta}=1.39$ 15. 958.6 2.37 21 7207.3 19 ⁻ 6248.4 17 ⁻ E2 $R_{\theta}=1.40$ 20. 960.1 2.58 25 4274.2 12 ⁺ 3313.8 10 ⁺ E2 $R_{\theta}=1.42$ 7. 960.6 <0.03 6915.2 18 ⁽⁻⁾ 5954.5 961 [‡] 1903.3 5 ⁺ 942.0 4 ⁺ 969.0 1.02 19 6981.6 18 ⁻ 6012.6 16 ⁻ E2 $R_{\theta}=1.40$ 13. 974.0 0.30 15 8013.5 20 ⁺ 7039.2 18 ⁺ E2 $R_{\theta}=1.40$ 13. 989.3 0.63 10 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ 989.9 3.05 20 5726.2 15 ⁻ 4736.4 13 ⁻ E2 $R_{\theta}=1.38$ 18. 990.3 9.1 5 5264.2 14 ⁺ 4274.2 12 ⁺ E2 $R_{\theta}=1.42$ 9.	948 [‡]		3383.4	(9+)	2435.3	8+		
954.8 11.7 6 2590.8 7 ⁻ 1634.9 6 ⁺ E1 $R_{\theta}=0.97$ 3. Mult.: from $\gamma(\theta)$ and $\gamma(\text{pol})$ in $(\alpha,n\gamma)$. 958.1 4.2 3 8165.5 21 ⁻ 7207.3 19 ⁻ E2 $R_{\theta}=1.39$ 15. 958.6 2.37 21 7207.3 19 ⁻ 6248.4 17 ⁻ E2 $R_{\theta}=1.40$ 20. 960.1 2.58 25 4274.2 12 ⁺ 3313.8 10 ⁺ E2 $R_{\theta}=1.42$ 7. 960.6 <0.03 6915.2 18 ⁽⁻⁾ 5954.5 961 [‡] 1903.3 5 ⁺ 942.0 4 ⁺ 969.0 1.02 19 6981.6 18 ⁻ 6012.6 16 ⁻ E2 $R_{\theta}=1.40$ 13. 974.0 0.30 15 8013.5 20 ⁺ 7039.2 18 ⁺ E2 $R_{\theta}=1.40$ 13. 989.3 0.63 10 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ 989.9 3.05 20 5726.2 15 ⁻ 4736.4 13 ⁻ E2 $R_{\theta}=1.38$ 18. 990.3 9.1 5 5264.2 14 ⁺ 4274.2 12 ⁺ E2 $R_{\theta}=1.42$ 9.	949.3	0.69 12	9876.3	24+	8927.4	22+	E2	$R_{\theta} = 1.44 \ 18.$
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	954.8	11.7 6	2590.8	7-	1634.9	6+	E1	$R_{\theta}=0.97$ 3.
938.1 4.2.5 8105.5 21 7207.3 19 E2 R_{θ} =1.39 15. 958.6 2.37 21 7207.3 19 ⁻ 6248.4 17 ⁻ E2 R_{θ} =1.40 20. 960.1 2.58 25 4274.2 12 ⁺ 3313.8 10 ⁺ E2 R_{θ} =1.42 7. 960.6 <0.03	050 1	4 2 2	01655	21-	7007.2	10-	EO	Mult.: from $\gamma(\theta)$ and $\gamma(\text{pol})$ in $(\alpha, n\gamma)$.
953.0 2.37 21 7207.3 19 6248.4 17 122 R_{θ} =1.40 20. 960.1 2.58 25 4274.2 12 ⁺ 3313.8 10 ⁺ E2 R_{θ} =1.40 20. 960.6 <0.03	938.1	4.2 3	8103.3 7207.3	21 10 ⁻	1201.5 6248.4	19 17 ⁻	EZ E2	$R_{\theta} = 1.39 IS.$
960.1 2.50 2.57 4274.2 12 5515.0 10 12 R_{θ} =1.427. 960.6 <0.03	950.0	2.57 21	4274.2	19	3313.8	10^{+}	E2 E2	$R_{\theta} = 1.40 \ 20.$ $R_{\phi} = 1.42 \ 7$
961.0 100.3 5 ⁺ 942.0 4 ⁺ 969.0 1.02 19 6981.6 18 ⁻ 6012.6 16 ⁻ E2 R_{θ} =1.40 13. 974.0 0.30 15 8013.5 20 ⁺ 7039.2 18 ⁺ E2 R_{θ} =1.40 13. 989.3 0.63 10 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ 989.9 3.05 20 5726.2 15 ⁻ 4736.4 13 ⁻ E2 R_{θ} =1.38 18. 990.3 9.1 5 5264.2 14 ⁺ 4274.2 12 ⁺ E2 R_{θ} =1.42 9.	960.6	<0.03	6015.2	$12 \\ 18^{(-)}$	5954 5	10		$\mathbf{K} \theta = 1 \cdot \mathbf{\tau} \mathbf{\Sigma} \mathbf{T}$.
961. 1903.5 3 942.0 4 969.0 1.02 19 6981.6 18 ⁻ 6012.6 16 ⁻ E2 R_{θ} =1.40 13. 974.0 0.30 15 8013.5 20 ⁺ 7039.2 18 ⁺ E2 R_{θ} =1.40 13. 989.3 0.63 10 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ 989.9 3.05 20 5726.2 15 ⁻ 4736.4 13 ⁻ E2 R_{θ} =1.38 18. 990.3 9.1 5 5264.2 14 ⁺ 4274.2 12 ⁺ E2 R_{θ} =1.42 9.	061	<0.05	1002.2	5+	042.0	4+		
974.0 0.30 15 8013.5 20 ⁺ 7039.2 18 ⁺ E2 R_{θ} =1.40 13. 989.3 0.63 10 9916.5 24 ⁽⁺⁾ 8927.4 22 ⁺ 22 ⁺ 989.9 3.05 20 5726.2 15 ⁻ 4736.4 13 ⁻ E2 R_{θ} =1.38 18. 990.3 9.1 5 5264.2 14 ⁺ 4274.2 12 ⁺ E2 R_{θ} =1.42 9.	901 °	1 02 10	1903.3 6081.6	J 18 ⁻	942.0 6012.6	4 16 ⁻	F2	$P_{a}=1.40.13$
989.3 0.63 10 9916.5 $24^{(+)}$ 8927.4 22^+ 989.9 3.05 20 5726.2 15^- 4736.4 13^- E2 R_{θ} =1.38 18. 990.3 9.1 5 5264.2 14^+ 4274.2 12^+ E2 R_{θ} =1.42 9.	974 N	0 30 15	8013 5	20^{+}	7039.2	18 ⁺	E2	$R_{\theta} = 1.40 \ I3.$
989.9 $3.05\ 20$ 5726.2 $15^ 4736.4\ 13^ E2$ R_{θ} =1.38 <i>18</i> . 990.3 $9.1\ 5$ $5264.2\ 14^+$ $4274.2\ 12^+$ $E2$ R_{θ} =1.42 9.	989 3	0.63 10	9916 5	$24^{(+)}$	8927 4	22+		ing 1.10.10.
990.3 9.1 5 5264.2 14^+ 4274.2 12^+ E2 R_{θ} =1.42 9.	989.9	3.05 20	5726.2	15-	4736.4	13-	E2	$R_{a}=1.38$ 18.
U · · · · ·	990.3	9.1 5	5264.2	14+	4274.2	12+	E2	$R_{\theta} = 1.42 \ 9.$
993.0 2.23 24 10910.0 $26^{(+)}$ 9916.5 $24^{(+)}$ E2 R_{θ} =1.38 18.	993.0	2.23 24	10910.0	$26^{(+)}$	9916.5	24 ⁽⁺⁾	E2	$R_{\theta} = 1.38 \ I8.$

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

Eγ	Iγ	E _i (level)	\mathbf{J}_i^{π}	E_f	\mathbf{J}_{f}^{π}	Mult. [†]	Comments
993.7	3.54 20	5726.2	15-	4732.3	13-	E2	$R_{\theta}=1.41\ 17.$
993.8	0.45 13	10910.0	$26^{(+)}$	9916.2	24+		
1000.7	16.1 6	6509.7	18^{+}	5508.9	16+	E2	$R_{q}=1.385$.
1018.5	0.77 24	8000.1	20-	6981.6	18-	E2	$R_{\theta}=1.39$ 14.
1022.0	0.18 14	10040.0	$24^{(-)}$	9017.9	(22^{-})	(E2)	$R_{a}=1.32$ 19.
1023.6	1 31 12	9457 7	$23^{(+)}$	8433 5	$21^{(+)}$	E2	$R_0 = 1.38 I f_0$
1033.1	<0.1	9033.2	22-	8000.1	20^{-}	E2	$R_{a}=1.40.23$
1034.7	0.62 21	1034.7 + x	(25^{-})	0.0+x	(23^{-})	E2	$R_{q}=1.39$ 17.
1040.9	0.40 5	9054.7	22+	8013.5	20+	E2	$R_{\theta} = 1.39 \ 10.$
1042	0.22 5	11082.6	$26^{(-)}$	10040.0	$24^{(-)}$		$R_{\theta} = (0.72 \ 13).$
1042.3#	< 0.03	7297 62	(18^{-})	6255 3	(16^{-})		
1042.3	<0.05 87.6	2677.4	(10) 7 ⁻	1634.9	(10^{+})		
1050.1	4.25.22	8234.8	21-	7185.0	19-	E2	$R_{a}=1.41.7$
1050.4	1 56 15	10508 1	25(+)	9457 7	23(+)	E2	$R_0 = 1.40.16$
1057.0	483	10933 3	$25^{-26^{+}}$	9876 3	$23^{-24^{+}}$	E2	$R_{\theta} = 1.46 \ PO.$
1077.6	15.4.6	7587.4	20^{+}	6509.7	18^{+}	E2	$R_{a}=1.375$
1090.4	0.13.10	11129 7	$26^{(-)}$	10040.0	$24^{(-)}$	E2 F2	$R_0 = 1.39 I7$
1092.3	2.51.24	9257.8	23-	8165.5	21-	E2	$R_{\theta} = 1.43 21$
1104.9	1656	9750 7	$24^{(-)}$	8645 7	22(-)	E2	$R_{0} = 1.386$
1106.8	10.3	10161.8	24^{+}	9054 7	22^{+}	E2	$R_0 = 1.38 \ IO$
1119.0	643	12048.4	$28^{(-)}$	10929.2	$26^{(-)}$	E2 F2	$R_0 = 1.42 I_2$
1130.3	2 83 14	9876 3	$20^{-20^{+}}$	8745 5	$20^{-20^{+}}$	E2 F2	$R_0 = 1.42 \ 12$
1130.5	0.30 15	9968.9	24+	8837.9	22^{+}	E2	$R_{\theta} = 1.38 24$
1134.3	2.39 17	9369.0	23-	8234.8	21-	E2	$R_{a}=1.42$ 10.
1149.5	0.7 4	2184.2 + x	(27^{-})	1034.7 + x	(25^{-})	E2	$R_{\theta} = 1.42 \ I6.$
1150.2	4.5 3	10408.0	25-	9257.8	23-	E2	$R_{\theta} = 1.43 \ 19.$
1152.2	0.35 1	12281.6	$28^{(-)}$	11129.7	$26^{(-)}$	E2	$R_{q}=1.41$ 12.
1153.0	0.8 5	11677.9	27-	10523.8	25-	E2	$R_{\theta} = 1.39 \ I3.$
1154.2	4.2 3	13247.7	30^{+}	12093.5	28^{+}	E2	$R_{\theta} = 1.41.$
1155.3	1.11 23	10523.8	25^{-}	9369.0	23-	E2	$R_{\theta} = 1.39 \ I3.$
1156.4	0.08 12	1156.4+y	(25^{+})	0.0+y	(23^{+})		
1158.5	19.8 7	8745.5	22^{+}	7587.4	20^{+}	E2	$R_{\theta} = 1.39 \ 9.$
1160.2	4.6 4	12093.5	28^{+}	10933.3	26^{+}	E2	$R_{\theta} = 1.41 \ 10.$
1170.8	18.4 <i>13</i>	9916.2	24+	8745.5	22^{+}	E2	$R_{\theta} = 1.40 \ 13.$
1171.0	4.0 <i>3</i>	11579.1	27-	10408.0	25-	E2	$R_{\theta} = 1.42 \ 17.$
1173.4	0.9 3	11335.5	26+	10161.8	24+	E2	$R_{\theta} = 1.41 \ I3.$
1175.8	0.5 4	12853.7	29-	11677.9	27-	E2	$R_{\theta} = 1.40 \ 17.$
1178.3	17.6 6	10929.2	26(-)	9750.7	24(-)	E2	$R_{\theta} = 1.40$ 7.
1183.2	0.40 25	11151.8	26+	9968.9	24+	E2	$R_{\theta} = 1.40 \ 25.$
1198.7	0.18 6	12281.6	$28^{(-)}$	11082.6	26(-)	E2	$R_{\theta} = 1.42 \ 22.$
1224.1	0.09 17	9968.9	24+	8745.5	22+		
1224.2	0.23 21	2380.6+y	(27^{+})	1156.4+y	(25^+)	E2	$R_{\theta} = 1.38 \ 17.$
1237.1	0.57 23	12572.9	281	11335.5	26	E2	$R_{\theta} = 1.39 \ 17.$
1244.4	1.32 19	13526.0	$30^{(-)}$	12281.6	28(-)	E2	$R_{\theta} = 1.41 \ 8.$
1245.9	6.8 4	2880.6	7-	1634.9	6+	El	$R_{\theta} = 0.90 \ 20.$
1050 1	0 11 27	0027.0	aa^+	7507 4	20^{+}	F 2	Mult.: from $\gamma(\theta)$ and $\gamma(\text{pol})$ in $(\alpha, n\gamma)$.
1230.1	0.11 21	883/.9	(20^{-})	/38/.4	20°	E2 E2	$K_{\theta} = 1.45 \ 25.$
1208.8	0.03 29	5455.0+X	(29)	2184.2+X	(27)	EZ	$\kappa_{\theta} = 1.5 / 10.$
1283.4	8.74	13331.8	$30^{(-)}$	12048.4	28(-)	E2	$K_{\theta} = 1.39 \ I3.$
1285.8	< 0.04	13858.0	30^{+}	125/2.9	28'	F 2	D 1 40 15
1292.7	0.33 10	30/3.3+y	(29°)	2380.0+y	(27°)	E2 E2	$\kappa_{\theta} = 1.40 \ IS.$
1271.3	0.90 22	12449.0	∠o ⁺ 30 ⁺	11131.8	20 ⁺	E2 E2	$R_{\theta} = 1.40 \ 20.$
1210./	0.43 24	13092.0	30	12012.9	20 (07 [±])	EZ	$\Lambda_{ij} = 1.40 I \mathcal{I}.$
1319*		12849.4		11530.4	(27^{+})		

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

Eγ	Iγ	E _i (level)	\mathbf{J}_i^{π}	E_f	\mathbf{J}_{f}^{π}	Mult. [†]		Comments
1332.1	1.30 10	14858.1	$32^{(-)}$	13526.0	$30^{(-)}$	E2	$R_{a}=1.41.8$	
1332.2	0 20 11	11082.6	$26^{(-)}$	9750 7	$24^{(-)}$	(E2)	$R_0 = (1.40, 18)$	
1333.7	334	6597.6	16^{+}	5264.2	14^{+}	E2	$R_{a}=1.39.10$	
1347.0	3.8.4	6611.1	16 ⁺	5264.2	14+	E2	$R_{a}=1.42.18$	
1358 7	526	2300.5	5(-)	942.0	<u>4</u> +			
1368.8	0.36.7	15261.2	32+	13892.0		F2	$R_{a} = 1.40.19$	
1370.1	0.50 20	5043.4+v	(31^+)	3673.3+v	(29^+)	E2	$R_{\theta} = 1.40 \ I_{2}$	
1378 7	0.10.79	11120.7	$26^{(-)}$	9750 7	$2^{(-)}$	E2	$R_{0} = 1.65$	
1386.6	0.48 16	4839.6+x	(31^{-})	3453.0+x	(29^{-})	E2 F2	$R_{\theta} = 1.0 5.$ $R_{\phi} = 1.39 17$	
1403.0	0.18 10	15261.2	32+	13858 6	$(2^{-})^{+}$	E2 F2	$R_{\theta} = 1.35 \text{ IV}$	
1409.9	0.75 16	13858.6	30^{+}	12449.0	28+	E2	$R_{a}=1.4.3$	
1431 5	1 24 13	16289.6	34(-)	14858 1	32(-)	E2 F2	$R_{\theta} = 1.44.9$	
1444 9	0.47.20	6488 3+v	(33^{+})	$5043.4 \pm v$	(31^+)	E2 F2	$R_{\theta} = 1.44 \ \mathcal{I}.$ $R_{\theta} = 1.39 \ \mathcal{I}.$	
1466 2 [#]	-0.02	0460.3 Ty	(33^{+})	7597 4	(51)	1.2	R_{θ} =1.59 15.	
1400.3"	< 0.02	9054.7	22 · =(-)	/58/.4	20.	D(O)	D 0.05 00	
1471.5	0.28 13	2413.6	5()	942.0	4'	D(+Q)	$R_{\theta} = 0.87 \ 20.$	
14/2.2	0.77 22	16/33.4	34'	15261.2	321	E2	$R_{\theta} = 1.39 \ I3.$	
1502.2	0.44 15	6341.8+x	(33)	4839.6+x	(31)	E2	$R_{\theta} = 1.38 \ I8.$	
1503.3 "	< 0.1	8013.5	20^{+}	6509.7	18^{+}			
1505.7 [#]	0.37 20	6126.2	16+	4619.4	14^{+}			
1526.1	0.40 19	8014.4+y	(35^{+})	6488.3+y	(33^{+})	E2	R_{θ} =1.38 <i>14</i> .	
1530 [‡]		7039.2	18^{+}	5508.9	16+			
1540.7	0.96 10	17830.3	$36^{(-)}$	16289.6	$34^{(-)}$	E2	$R_{\rho}=1.42$ 12.	
1565.3	0.7 3	18298.7	36+	16733.4	34+	E2	$R_{\theta} = 1.40 \ 14.$	
1602.9	0.41 13	7944.7+x	(35^{-})	6341.8+x	(33^{-})	E2	$R_{\theta} = 1.43 \ 20.$	
1609.6	0.31 18	9624.1+y	(37^{+})	8014.4+y	(35+)	E2	$R_{\theta} = 1.39 \ 15.$	
1658.2	0.85 12	19488.6	38(-)	17830.3	36(-)	E2	$R_{\theta} = 1.44 \ 13.$	
1661.5	0.70 19	19960.3	38+	18298.7	36+	E2	$R_{\theta} = 1.39 \ 16.$	
1696.8	0.19 17	11320.9+y	(39^{+})	9624.1+y	(37^{+})	E2	$R_{\theta} = 1.43 \ 15.$	
1709.5	0.12 11	9654.3+x	(37-)	7944.7+x	(35-)	E2	$R_{\theta} = 1.41 \ 22.$	
1756.6	0.51 18	21716.9	40+	19960.3	38+	E2	$R_{\theta} = 1.39 \ 17.$	
1781.3	0.76 11	21269.9	$40^{(-)}$	19488.6	38(-)	E2	$R_{\theta} = 1.42 \ 15.$	
1786.7	0.20 16	13107.6+y	(41^{+})	11320.9+y	(39^{+})	E2	$R_{\theta} = 1.39 \ 16.$	
1823.3	0.11 11	11477.6+x	(39 ⁻)	9654.3+x	(37 ⁻)	E2	$R_{\theta} = 1.43 \ 21.$	
1852.1	0.44 16	23569.0	42+	21716.9	40+	E2	$R_{\theta} = 1.41 \ 18.$	
1877.2	0.18 13	14984.8+y	(43^{+})	13107.6+y	(41^{+})	E2	$R_{\theta} = 1.42 \ 16.$	
1907.4	0.63 10	23177.3	42(-)	21269.9	40(-)	E2	$R_{\theta} = 1.41 \ 15.$	
1939.6	0.10 13	13417.2+x	(41^{-})	11477.6+x	(39 ⁻)	E2	$R_{\theta} = 1.42 \ 23.$	
1947.5	0.39 15	25516.5	44 ⁺	23569.0	42 ⁺	E2	$R_{\theta} = 1.38 \ 19.$	
1968.5	0.13 13	16953.3+y	(45^{+})	14984.8+y	(43^{+})	E2	$R_{\theta} = 1.39 \ 20.$	
2036.8	0.51 9	25214.1	44 ⁽⁻⁾	23177.3	$42^{(-)}$	E2	$R_{\theta} = 1.40 \ 20.$	
2041.9	0.27 12	27558.4	46+	25516.5	44+	E2	$R_{\theta} = 1.40 \ 23.$	
2049.8	0.10 13	15467.0+x	(43^{-})	13417.2+x	(41^{-})	E2	$R_{\theta} = 1.4 \ 3.$	
2050.8	0.13 12	19004.1+y	(47 ⁺)	16953.3+y	(45+)	E2	$R_{\theta} = 1.42 \ 25.$	
2093.0	0.10 10	21097.2+y	(49+)	19004.1+y	(47^+)	E2	$R_{\theta} = 1.4 \ 3.$	
2129.4	0.08 10	23226.6+y	(51^{+})	21097.2+y	(49^{+})	E2	$R_{\theta} = 1.4 \ 3.$	
2137.8	0.25 11	29696.2	48+	27558.4	46+	E2	R_{θ} =1.43 25.	
2150.0	0.09 10	17617.0+x	(45 ⁻)	15467.0+x	(43 ⁻)	E2	$R_{\theta} = 1.4 \ 4.$	
2163.6	0.45 8	27377.7	$46^{(-)}$	25214.1	44(-)	E2	$R_{\theta} = 1.4 \ 3.$	
2187.4	0.06 14	25414.0+y	(53 ⁺)	23226.6+v	(51^{+})		*	
2231.0	0.21 9	31927.3	50+	29696.2	48+	E2	R_{θ} =1.43 26.	
2236.8	0.06 8	19853.8+x	(47 ⁻)	17617.0+x	(45 ⁻)	E2	$R_{\theta} = 1.4 5.$	
2259.7	0.04 10	27673.7+y	(55 ⁺)	25414.0+y	(53+)			
2283.8	0.33 5	29661.5	$48^{(-)}$	27377.7	$46^{(-)}$	E2	$R_{\theta} = 1.4 \ 4.$	

				⁸² Se(⁴⁸	$Ca,4n\gamma)$	2007H	a34 (continued)		
$\gamma(^{126}$ Xe) (continued)									
Eγ	I_{γ}	E _i (level)	\mathbf{J}_i^{π}	E_f	\mathbf{J}_{f}^{π}	Mult. [†]		Comments	
2311 [‡]		10255.8+x		7944.7+x	(35 ⁻)				
2317.1	0.18 6	34244.4	52+	31927.3	50^{+}	E2	$R_{\theta} = 1.4 \ 3.$		
2320.8	0.03 5	22174.7+x	(49 ⁻)	19853.8+x	(47^{-})	E2	$R_{\theta} = 1.40 \ 25.$		
2327.7 [#]	< 0.01	32345.9+y?	(59^{+})	30018.2+y	(57^{+})				
2336.2	0.05 6	38941.5	56+	36605.3	54+	E2	$R_{\theta} = 1.4 \ 4.$		
2344.5	0.03 6	30018.2+y	(57^{+})	27673.7+y	(55^{+})		0		
2349.0	0.08 3	34364.6	(52-)	32015.6	50(-)	(E2)	$R_{\theta} = (1.5 5).$		
2354.0	0.13 <i>3</i>	32015.6	50 ⁽⁻⁾	29661.5	$48^{(-)}$	E2	$R_{\theta} = 1.5 5.$		
2360.9	0.12 7	36605.3	54+	34244.4	52+	E2	$R_{\theta} = 1.4 \ 3.$		
2421.0	0.03 5	32082.6		29661.5	$48^{(-)}$				
2424.4 [#]	< 0.01	24599.1+x?	(51^{-})	22174.7+x	(49^{-})				
2442.0	0.07 2	36806.6	(54^{-})	34364.6	(52^{-})				
2450.0	0.08 4	34532.6	()	32082.6	()				
2515.0	0.04 1	39321.6	(56 ⁻)	36806.6	(54 ⁻)				

[†] From γ ray angular distribution ratio $R_{\theta} = I\gamma$ (forward–backward)/ $I\gamma$ ($\approx 90^{\circ}$) with detectors at angles $17^{\circ} - 50^{\circ}$, $130^{\circ} - 163^{\circ}$, and $70^{\circ}-130^{\circ}$. For streched Q transitions $R_{\theta}=1.40$ 4, whereas for streched D transitions $R_{\theta}=0.74$ 2 is expected. The streched Q's are assumed to be E2 by the evaluators. There are possibilities that $R_{\theta}=1.4$ and 0.7 may be correspond to $\Delta J=0$ D+Q and $\Delta=1$ Q transitions, respectively, but they are less likely.

 \pm Shown in figures of the level scheme in 2007Ha34, but not listed in tables.

[#] Placement of transition in the level scheme is uncertain.

<u>Level Scheme</u> Intensities: Relative I_{γ} Legend

 $\begin{array}{c|c} & & I_{\gamma} < 2\% \times I_{\gamma}^{max} \\ \hline & & I_{\gamma} < 10\% \times I_{\gamma}^{max} \\ \hline & & I_{\gamma} > 10\% \times I_{\gamma}^{max} \\ \hline & & \gamma \operatorname{Decay} (\operatorname{Uncertain}) \end{array}$

in to		
(59 ⁺)	ా - సై	<u>32345.9+y</u>
(57+)		30018.2+y
(55+)	⁽²⁾	27673.7+y
(53+)		25414.0+y
(51 ⁺)		23226.6+y
(49+)		21097.2+y
(47 ⁺)		19004.1+y
(45 ⁺)		16953.3+y
(43+)		14984.8+y
(41 ⁺)		13107.6+y
(39 ⁺)		11320.9+y
(37+)		9624.1+y
(35 ⁺)		8014.4+y
(33 ⁺)		6488.3+y
(31+)		5043.4+y
(29 ⁺)		3673.3+y
(27 ⁺)		2380.6+y
(25 ⁺)		1156.4+y
(23+)	· · · · · · · · · · · · · · · · · · ·	0.0+y
(51 ⁻)		<u>24599.1+x</u>
(49 ⁻)		22174.7+x
(47 ⁻)	v^v <u>v</u>	19853.8+x
(45-)		17617.0+x
(43-)		15467.0+x
(41-)	\$\vec{v}{v}_{\vec{v}}_{\vec{v}{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{v}{v}_{\vec{v}{v}_{\vec{v}{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}_{\vec{v}{v}{v}_{\vec{v}{v}{v}}{v}_{\vec{v}{v}{v}}}}}}}}}}}}}}}}}}}}}}}}}}}}}	13417.2+x
(39 ⁻)		11477.6+x
(37^{-})		<u>10255.8+x</u> 9654.3+x
(35 ⁻)		7944.7+x
(33-)		6341.8+x
(31 ⁻)		4839.6+x
(29 ⁻)	<u> </u>	3453.0+x
(27 ⁻)		2184.2+x
$\frac{(25^{-})}{(22^{-})}$		<u> 1034.7+x</u>
$\frac{(23)}{(56^{-})}$		- 0.0+x
(54 ⁻)		36806.6
(01)	¥	
0+		0.0

¹²⁶₅₄Xe₇₂



¹²⁶₅₄Xe₇₂



¹²⁶₅₄Xe₇₂



 82 Se(48 Ca,4n γ)

2007Ha34

Legend



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

14

 $^{126}_{54}$ Xe₇₂-14

	$\frac{^{82}Se(^{48}Ca,4n\gamma)}{^{2007Ha34}}$ Legend	
	$\frac{\text{Level Scheme (continued)}}{\text{Intensities: Relative } I_{\gamma}} \xrightarrow{I_{\gamma} < 2\% \times I_{\gamma}^{n}} I_{\gamma} < 10\% \times I_{\gamma}^{n}} I_{\gamma} > 10\% \times I_{\gamma}^{n}} I_{\gamma} > 10\% \times I_{\gamma}^{n}}$	ax ax ax certain)
18		7245.3
19-		207.3
19		185.0
18+	<u> </u>	/039.2
18-		981.6
$\frac{18^{(-)}}{17^{(+)}}$	$- \downarrow - \downarrow - \downarrow - \downarrow - \downarrow - \downarrow - \uparrow - \uparrow \uparrow \uparrow \uparrow \uparrow $	<u>915.2</u>
<u></u>	2 (e) 2 (2) (2) (2) (2) (2) (2) (2) (2) (2)	18/6.7
$\frac{16^+}{16^+}$		<u>611.1</u> 597.6
18+		509.7
10		007.1
17-		245.2
$\frac{1}{(16^{-})}$		<u>545.5</u> 5255.3
17-		5248.4
(16 ⁻)		5198.2
16+		5126.2
16-		6012.6
		954.5
16+		923.4
15-		5726.2
		694.9
16+		508.9
15-		202 5
$\frac{15}{(14^{-})}$		5365.0
14(-)		5333.2
14+		264.2
14-		5006.6
14+		5090.5
13-		1736.4
13-		1732.3
14+	· · · · · · · · · · · · · · · · · · ·	619.4
(12^{-})		596.2
$\frac{13}{(12^{-})}$		4531.4
<u> </u>		<u></u>
12+		274.2
12	★ 4	240.0
0+		0.0

¹²⁶₅₄Xe₇₂



¹²⁶₅₄Xe₇₂

7-

 0^+

0.0

82 Se(48 Ca,4n γ) 2007Ha34



¹²⁶₅₄Xe₇₂



¹²⁶₅₄Xe₇₂



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





¹²⁶₅₄Xe₇₂

			$\begin{array}{l} \textbf{Band}(\textbf{p})\textbf{:} \ \textbf{BAND} \ \textbf{c}, (\textbf{PI}, \\ \alpha) = (+, 1), \ \textbf{SIGNATURE} \\ \textbf{PARTNER OF BAND b}, \\ \textbf{Configuration} = \pi(\\ \textbf{g}_{7/2} \otimes \textbf{h}_{11/2}) \\ \textbf{v}(\textbf{i}_{13/2} \otimes \textbf{h}_{11/2}) \end{array}$
			(59 ⁺) <u>32345.9+y</u>
			(57 ⁺) ²³²⁸ 30018.2+y
			(55 ⁺) ²³⁴⁴ 27673.7+y
			(53 ⁺) ²²⁶⁰ 25414.0+y
			(51 ⁺) ²¹⁸⁷ 23226.6+y
			(49 ⁺) ²¹²⁹ 21097.2+y
			(47 ⁺) ²⁰⁹³ 19004.1+y
			(45 ⁺) ²⁰⁵¹ 16953.3+y
			$\frac{(43^+)}{(41^+)} \frac{1968}{14984.8+y}$
			$\frac{(41^{\circ})^{-1}}{(39^{+})} \frac{178711320.9+y}{178711320.9+y}$
			(37 ⁺) 1697 9624.1+y
Band(O): BAND a, (PI,			$\frac{(35^+)}{(33^+)} = \frac{1610}{1526} \frac{8014.4 + y}{6488} \frac{3}{3+y}$
α)=(-,0), SIGNATURE			(33^{+}) 1320 0400.3+y (21^{+}) 1445 5043 4+y
PARTNER OF BAND d,	Band(P): BAND b, (PI,		(31^{+}) 1445 3043.4+y (20^{+}) 1270 3673 3 1 y
Configuration= π (α)=(+,0), SIGNATURE		$\frac{(29^{+})}{(27^{+})}$ 13/0 30/3.3+y
$\mathbf{g}_{7/2}^2 \otimes \mathbf{h}_{11/2}^2$	PARTNER OF BAND c,		(27^{+}) 1293 2360.0+y (25^{+}) 1156 4+y
$V(1_{13/2} \otimes \mathbf{n}_{11/2}),$	Configuration= π ((23^+) 1224 1150.4+y (23^+) 1156 0.0+y
Q(transition)=5.2 + 4-5	$g_{7/2} \otimes h_{11/2})$		(25) 1156 0.0+y
Irom DSAM	$v(\mathbf{i}_{13/2} \otimes \mathbf{h}_{11/2})$		
(56 ⁻) 39321.6	<u>56+</u> <u>38941.5</u>		
(54 ⁻) ²⁵¹⁵ 36806.6	<u>54+</u> 2336 36605.3		
(52 ⁻) ²⁴⁴² 34364.6	<u>52+</u> 2361 34244.4		
50 ⁽⁻⁾ 2349 32015.6	<u>50+</u> 2317 31927.3		
<u>48⁽⁻⁾</u> 2354 29661.5	<u>48+ 2231</u> 29696.2		
<u>46⁽⁻⁾ 2284</u> 27377.7	46^+ 2138 27558.4		
<u>44⁽⁻⁾ 2164 25214.1</u>	<u>44+</u> 2042 25516.5		
<u>42⁽⁻⁾</u> 2037 23177.3	<u>42+</u> <u>1948</u> <u>23569.0</u>		
<u>40⁽⁻⁾ 1907 21269.9</u>	$\frac{40^+}{20^+} \frac{1852}{1757} \frac{21716.9}{100000}$		
<u>38⁽⁻⁾ 1781</u> 19488.6	<u>38</u> ⁺ 1/37 19960.3		
36 ⁽⁻⁾ 1658 17830.3	$\frac{36^+}{24^+}$ 1662 18298.7	Band(O): BAND b+. (PI	
34 ⁽⁻⁾ 1541 16289.6	$\frac{34}{22+}$ 1565 16733.4	α = (+.0)	
32(-) 1432 14858.1	$\frac{32}{30+}$ 1472 15261.2	w/-(1 , 0)	
30 ⁽⁻⁾ 13526.0	30° 1369 / 12572 0	30+ 13858.6	
28(-) 1352 12281.6	$\frac{20}{26^+}$ 1319 /11225 5	28+ 1410 12449.0	
26(-) 1129.7	20 11355.5	26^+ 1298 11151.8	
24(-) 10040.0	$\frac{2-}{22^+}$ 1173 / 0054 7	24+ 1183 9968.9	
(22^{-}) 1020 9017.9	$\frac{22}{20^+}$ 1107 / 2013 5	22+ 1130 8837.9	
·			
	$\frac{974}{16^+}$ $\frac{974}{913}$ $\frac{100002}{6126.2}$		

¹²⁶₅₄Xe₇₂



¹²⁶₅₄Xe₇₂