Search parameters:
1 S <=T(level)<= 1E100 GY

Show E_{level} plots | Show $T_{1/2}$ plots

Level and Gamma Information

More detailed information can be obtained by clicking on each NUCLEAR NAME

Nucleus	E_{level}(keV)	Jπ	$T_{1/2}$
1NN	0.0	1/2+	613.9 s *6*
1H	0.0	1/2+	STABLE
2H	0	1+	STABLE
3H	0.0	1/2+	12.32 y *2*
3HE	0.0	1/2+	STABLE
4HE	0.0	0+	STABLE
6LI	0.0	1+	STABLE
7LI	0.0	3/2-	STABLE
7BE	0.0	3/2-	53.22 d *6*
9BE	0.0	3/2-	STABLE
10BE	0.0	0+	$1.51\times10^{+6}$ y *4*
11BE	0	1/2+	13.76 s *7*
10B	0.0	3+	STABLE
11B	0	3/2-	STABLE
13B	3534.6 *31*		> 0.2 ps
10C	0.0	0+	19.290 s *12*
11C	0	3/2-	20.364 m *14*
12C	0	0+	STABLE
13C	0.0	1/2-	STABLE
13C	19510	(5/2-)	≥ 500 keV
14C	0.0	0+	5700 y *30*
15C	0.0	1/2+	2.449 s *5*
12N	9035 *12*	(1-)	16 keV *+20-16*
13N	0.0	1/2-	9.965 m *4*
13N	12558 *23*		> 400 keV
13N	12937 *24*		> 400 keV
14N	0.0	1+	STABLE
15N	0.0	1/2-	STABLE
16N	0.0	2-	7.13 s *2*
16N	6840	GE 2	> 140 keV
17N	0.0	1/2-	4.173 s *4*
14O	0.0	0+	70.606 s *18*
15O	0.0	1/2-	122.24 s *16*
16O	0.0	0+	STABLE
17O	0	5/2+	STABLE
17O	12928 *20*	(1/2+,7/2-)	≥ 150 keV
17O	19.28E3 *7*		> 0.75 MeV
18O	0.0	0+	STABLE
19O	0.0	5/2+	26.88 s *5*
19O	2371.5 *10*	9/2+	> 2.4 ps
19O	3067.4 *16*	(3/2)+	≥ 0.7 ps
19O	3153.5 *17*	5/2+	≥ 0.7 ps
20O	0.0	0+	13.51 s *5*
21O	0.0	(5/2+)	3.42 s *10*
22O	0.0	0+	2.25 s *9*
24O	4.76E3 *21*	2+	0.05 MeV *+21-5*
24O	5.33E3 *21*	(1+)	0.03 MeV *+12-3*
17F	0.0	5/2+	64.49 s *16*

18F	0.0	1+	109.77 m *5*
19F	0.0	1/2+	STABLE
19F	6500.0 *9*	11/2+	> 2.4 eV
20F	0.0	2+	11.07 s *6*
21F	0.0	5/2+	4.158 s *20*
22F	0.0	(4+)	4.23 s *4*
23F	0.0	(5/2+)	2.23 s *14*
18NE	0.0	0+	1672 ms *8*
19NE	0.0	1/2+	17.22 s *2*
19NE	4635 *4*	13/2+	> 0.7 ps
20NE	0.0	0+	STABLE
20NE	≈8700	0+	> 800 keV
21NE	0.0	3/2+	STABLE
22NE	0.0	0+	STABLE
23NE	0.0	5/2+	37.25 s *10*
24NE	0	0+	3.38 m *2*
34NE	0	0+	> 60 ns
21NA	0.0	3/2+	22.49 s *4*
22NA	0.0	3+	2.6018 y *22*
23NA	0.0	3/2+	STABLE
24NA	0.0	4+	14.956 h *3*
25NA	0	5/2+	59.1 s *6*
26NA	0	3+	1.07128 s *25*
37NA	0		> 60 ns
22MG	0.0	0+	3.8755 s *12*
23MG	0.0	3/2+	11.3046 s *45*
24MG	0	0+	STABLE
25MG	0	5/2+	STABLE
26MG	0.0	0+	STABLE
27MG	0.0	1/2+	9.458 m *12*
27MG	3884.6 *4*	(5/2+,9/2+)	> 0.5 ps
28MG	0.0	0+	20.915 h *9*
29MG	0	3/2+	1.30 s *12*
32MG	1058 *2*	0+	> 7 ns
24AL	0	4+	2.053 s *4*
25AL	0	5/2+	7.183 s *12*
25AL	4192 *4*	3/2+	> 0.5 keV
25AL	4516 *5*	(9/2)+	> 6.5 eV
25AL	6322 *5*	7/2	> 0.4 keV
26AL	0.0	5+	$7.17\times10^{+5}$ y *24*
26AL	228.305 *13*	0+	6.3460 s *8*
26AL	3977.91 *9*	0-	> 1.0 ps
27AL	0.0	5/2+	STABLE
28AL	0.0	3+	2.245 m *2*
29AL	0	5/2+	6.56 m *6*
30AL	0	3+	3.62 s *6*
40AL	0.0		> 260 ns
42AL	0		> 170 ns
43AL	0		> 170 ns
26SI	0.0	0+	2.2453 s *7*
27SI	0.0	5/2+	4.15 s *4*
28SI	0.0	0+	STABLE
29SI	0	1/2+	STABLE
30SI	0	0+	STABLE
31SI	0.0	3/2+	157.24 m *20*
32SI	0.0	0+	157 y *7*
32SI	5785.7 *16*	(0,1,2)+	≥ 0.8 ps
33SI	0	3/2+	6.11 s *21*
34SI	0.0	0+	2.77 s *20*
43SI	0		> 60 ns

29P	0	1/2+	4.142 s *15*
30P	0	1+	2.498 m *4*
31P	0.0	1/2+	STABLE
32P	0	1+	14.268 d *5*
33P	0.0	1/2+	25.35 d *11*
34P	0	1+	12.43 s *10*
34P	2228.6 *4*	2(-)	> 2 ps
34P	2320.6 *4*	3(-)	> 7 ps
34P	6237.2 *5*	7(+)	> 6.9 ps
34P	7920.1 *10*		> 0.35 ps
35P	0	1/2+	47.3 s *8*
36P	0	4-	5.6 s *3*
37P	0	(1/2+)	2.31 s *13*
45P	0.0		> 200 ns
30S	0	0+	1.178 s *5*
30S	3667.5 *10*		> 1 ps
31S	0.0	1/2+	2.5534 s *18*
32S	0	0+	STABLE
33S	0.0	3/2+	STABLE
34S	0.0	0+	STABLE
35S	0	3/2+	87.37 d *4*
36S	0	0+	STABLE
36S	5391.4 *9*	2+	> 0.2 ps
37S	0	7/2-	5.05 m *2*
38S	0	0+	170.3 m *7*
38S	2825.3 *11*	4+	> 0.14 ps
39S	0	(7/2)-	11.5 s *5*
40S	0	0+	8.8 s *22*
41S	0.0		1.99 s *5*
42S	0	0+	1.016 s *15*
33CL	0	3/2+	2.511 s *4*
34CL	0.0	0+	1.5266 s *4*
34CL	146.36 *3*	3+	31.99 m *3*
34CL	2721.1 *2*	2-	> 1.4 ps
34CL	5540.8 *11*	3-	> 0.7 ps
35CL	0	3/2+	STABLE
36CL	0.0	2+	$3.013\times10^{+5}$ y *15*
37CL	0	3/2+	STABLE
37CL	4810.9 *3*	7/2	> 0.35 ps
37CL	6046.17 *8*	11/2+	> 1.4 ps
38CL	0	2-	37.230 m *14*
39CL	0	3/2+	56.2 m *6*
39CL	396.42 *7*	1/2+	> 1.4 ps
39CL	1301.21 *15*	(5/2+)	> 2.1 ps
39CL	1785.86 *18*	(7/2-)	> 1.4 ps
39CL	2423.7 *3*	(9/2+)	> 1.2 ps
39CL	2834.3 *3*	(11/2+)	> 1.2 ps
40CL	0	2-	1.35 m *3*
41CL	0	(1/2+)	38.4 s *8*
42CL	0	(2-)	6.8 s *3*
43CL	0	(1/2+)	3.13 s *9*
49CL	0.0		≥ 170 ns
34AR	3873 *3*	0+	> 187 fs
35AR	0	3/2+	1.7756 s *10*
36AR	0.0	0+	STABLE
36AR	4329.1 *7*	(0,1,2)+	> 485 fs
37AR	0.0	3/2+	35.011 d *19*
38AR	0.0	0+	STABLE
38AR	5974.8 *2*	(0+:3-)	> 1.7 ps
38AR	6249.9 *3*	2+	> 111 fs

38AR	6476.6 *19*	(0+:3-)	> 0.17 ps
38AR	7289.6 *8*	(3-,4+)	> 55 fs
38AR	7508.12 *22*	7-	≥ 42 fs
39AR	0	7/2-	268 y *8*
39AR	2358.284 *11*	1/2+	> 0.42 ps
39AR	2829.934 *17*	1/2+	> 0.69 ps
40AR	0	0+	STABLE
40AR	4230 *2*	4(-)	> 2.8 ps
41AR	0	7/2-	109.61 m *4*
42AR	0.0	0+	32.9 y *11*
42AR	3096.1 *5*	4+	> 3.5 ps
43AR	0	5/2(-)	5.37 m *6*
44AR	0.0	0+	11.87 m *5*
44AR	3439.4 *11*	(6+)	> 27.7 ps
45AR	0.0	5/2-,7/2-	21.48 s *15*
46AR	0.0	0+	8.4 s *6*
47AR	0	(3/2)-	1.23 s *3*
53AR	0		> 620 ns
37K	0.0	3/2+	1.225 s *7*
37K	2285.24 *12*	(5/2+,7/2+)	> 243 fs
38K	0	3+	7.651 m *19*
38K	3703.7 *4*	(1+,2,3+)	> 0.76 ps
39K	0	3/2+	STABLE
40K	0	4-	$1.248\times10^{+9}$ y *3*
41K	0.0	3/2+	STABLE
41K	2494.91 *3*	9/2+	> 3.1 ps
42K	0	2-	12.355 h *7*
43K	0	3/2+	22.3 h *1*
43K	1206.91 *6*	(5/2,7/2)+	> 4.8 ps
43K	2508.34 *10*	(11/2+)	> 5 ps
44K	0.0	2-	22.13 m *19*
45K	0.0	3/2+	17.81 m *61*
46K	0.0	(2-)	105 s *10*
47K	0	1/2+	17.50 s *24*
48K	0.0	1(-)	6.8 s *2*
49K	0.0	(1/2+,3/2+)	1.26 s *5*
49K	1438.3 *4*	(7/2+)	> 0.35 ps
49K	2104.2 *5*	(7/2-)	> 0.35 ps
39CA	3882 *2*	(3/2-,5/2,7/2+)	> 1.7 ps
40CA	0.0	0+	STABLE
41CA	0.0	7/2-	$9.94\times10^{+4}$ y *15*
42CA	0.0	0+	STABLE
42CA	3300.0 *4*	0+	> 0.9 ps
43CA	0	7/2-	STABLE
44CA	0.0	0+	STABLE
44CA	3913.80 *8*	5-	> 2 ps
45CA	0.0	7/2-	162.61 d *9*
45CA	1554.37 *8*	(11/2-)	> 2.1 ps
45CA	2877.99 *12*	(15/2-)	> 2.1 ps
46CA	0.0	0+	STABLE
46CA	2423.1 *8*	0+	> 4.5 ps
47CA	0.0	7/2-	4.536 d *3*
47CA	2013.53 *10*	3/2-	> 6 ps
47CA	2578.33 *10*	3/2+	> 12 ps
47CA	2599.53 *11*	1/2+	> 1 ps
48CA	0.0	0+	2.9×10^{19} y *+42-11*
49CA	0.0	3/2-	8.718 m *6*
49CA	5443.9	1/2-	2.5 keV *+36-25*
49CA	5553	GE 5/2	≥ 0.38 keV
50CA	0.0	0+	13.45 s *5*

51CA	0.0	3/2(-)	10.0 s *8*
52CA	0	0+	4.6 s *3*
57CA	0		> 620 ns
42SC	616.28 *6*	7+	61.7 s *4*
42SC	2269.14 *4*	2+	> 70 fs
42SC	2433.62 *18*	4+	> 0.14 ps
42SC	2910.3 *7*	4+	> 0.8 ps
42SC	2995.53 *7*	4+	> 0.14 ps
42SC	3224.01 *20*	(5+)	> 0.21 ps
42SC	3321.36 *10*	(1+,2,3+)	> 0.14 ps
42SC	3718.6 *5*	(5+)	> 70 fs
43SC	0.0	7/2-	3.891 h *12*
43SC	2383.1 *4*	3/2(+)	> 0.31 ps
43SC	3142.05 *12*	13/2+	> 0.55 ps
44SC	0.0	2+	4.0420 h *25*
44SC	271.241 *10*	6+	58.61 h *10*
44SC	531.42 *14*	3(-)	> 3.8 ps
45SC	0.0	7/2-	STABLE
45SC	2106.3 *3*	15/2-	> 1.4 ps
46SC	0.0	4+	83.79 d *4*
46SC	142.528 *7*	1-	18.75 s *4*
47SC	0.0	7/2-	3.3492 d *6*
47SC	2148.2 *5*		> 2 ps
48SC	0.0	6+	43.71 h *9*
49SC	0.0	7/2-	57.18 m *13*
49SC	3991.0 *9*	1/2+	≥ 0.7 ns
50SC	0.0	5+	102.5 s *5*
51SC	0.0	(7/2)-	12.4 s *1*
52SC	0.0	3(+)	8.2 s *2*
53SC	0.0	(7/2-)	2.6 s *4*
42TI	1854.2 *12*	0+	> 0.14 ps
42TI	2676.6 *8*	4+	> 1.4 ps
44TI	0.0	0+	59.1 y *3*
44TI	1904.4 *8*	0+	> 0.5 ps
45TI	0.0	7/2-	184.8 m *5*
45TI	1565.4 *7*	1/2+	> 2.8 ps
46TI	0.0	0+	STABLE
47TI	0.0	5/2-	STABLE
47TI	2364.9 *2*	1/2+	> 1.53 ps
47TI	2682.30 *5*	11/2(-)	> 2.10 ps
48TI	0.0	0+	STABLE
48TI	4564.8 *3*	8(+)	> 3.5 ps
48TI	4956.6 *4*	(4+,5,6-)	> 1.0 ps
48TI	6103.2 *7*	10(+),8	> 1.4 ps
48TI	7427.9 *7*	9,7	> 0.7 ps
49TI	0.0	7/2-	STABLE
50TI	0.0	0+	STABLE
50TI	4172.003 *19*	3+	> 0.83 ps
51TI	0.0	3/2-	5.76 m *1*
52TI	0.0	0+	1.7 m *1*
53TI	0.0	(3/2)-	32.7 s *9*
54TI	0.0	0+	2.1 s *10*
55TI	0.0	(1/2)-	1.3 s *1*
62TI	0	0+	> 620 ns
63TI	0		> 360 ns
47V	0.0	3/2-	32.6 m *3*
48V	0.0	4+	15.974 d *3*
49V	0.0	7/2-	330 d *15*
50V	0.0	6+	$2.65\times10^{+17}$ y *+16-18*
50V	1402.0 *4*	3+	> 0.8 ps

50V	1677.4 *4*	3+	> 0.32 ps
50V	1752.5 *7*	3+,4+,5+	> 1.3 ps
50V	1812.8 *15*	(2,3)+	> 2.9 ps
51V	0.0	7/2-	STABLE
51V	2546.4 *6*	1/2+	> 0.7 ps
51V	3385.587 *23*	13/2-	> 0.87 ps
52V	0.0	3+	3.743 m *5*
53V	0.0	7/2-	1.543 m *14*
53V	1266.0 *9*	(7/2,9/2)-	> 1.1 ps
53V	1653 *4*	(9/2,11/2)-	> 0.45 ps
53V	4085.2 *6*	(17/2,19/2-)	> 0.7 ps
54V	0.0	3+	49.8 s *5*
54V	2297.9 *3*	(7)	> 0.35 ps
55V	0.0	(7/2-)	6.54 s *15*
65V	0		> 360 ns
66V	0		> 360 ns
67V	0		> 620 ns
48CR	0.0	0+	21.56 h *3*
48CR	4876.0 *4*	(6-)	> 0.7 ps
49CR	0.0	5/2-	42.3 m *1*
49CR	1703.2 *4*	1/2-	> 3.8 ps
49CR	1981.8 *3*	3/2+	> 1.39 ps
49CR	2978.7 *5*	(3/2+)	> 0.69 ps
49CR	3892.2 *4*	13/2+	> 6.9 ps
50CR	0.0	0+	> $1.3\times10^{+18}$ y
51CR	0.0	7/2-	27.704 d *4*
52CR	0.0	0+	STABLE
53CR	0.0	3/2-	STABLE
54CR	0.0	0+	STABLE
54CR	3785.71 *12*	(4)+	> 2.8 ps
54CR	3870.4 *5*		> 28 fs
54CR	3987.42 *21*		> 42 fs
55CR	0.0	3/2-	3.497 m *3*
56CR	0.0	0+	5.94 m *10*
56CR	2681.8 *10*	(4+)	≥ 0.7 ps
56CR	3251.84 *17*	6+	≥ 0.7 ps
56CR	4447.79 *20*	(7-)	≥ 0.7 ps
57CR	0.0	(3/2)-	21.1 s *10*
58CR	0.0	0+	7.0 s *3*
59CR	0.0	(1/2-)	0.74 s *28*
68CR	0.0	0+	> 360 ns
69CR	0		> 620 ns
70CR	0.0	0+	> 620 ns
50MN	225.28 *9*	5+	1.75 m *3*
50MN	1917.11 *12*	5+	> 0.7 ps
50MN	8277.4 *18*	(15+)	> 2 ps
51MN	0.0	5/2-	46.2 m *1*
51MN	1817.1 *2*	3/2(-)	> 0.7 ps
51MN	2275.9 *2*	1/2+	> 1.2 fs
51MN	2701.6 *5*	3/2-	> 0.5 ps
51MN	9471.3 *9*	25/2-,27/2	> 0.69 ps
52MN	0.0	6+	5.591 d *3*
52MN	377.749 *5*	2+	21.1 m *2*
52MN	4679.5 *5*	9-	> 0.78 ps
53MN	0.0	7/2-	$3.7\times10^{+6}$ y *4*
53MN	3007.13 *18*	(5/2)+	> 0.84 ps
54MN	0.0	3+	312.20 d *20*
54MN	1460.6 *6*	(4+,5+)	> 0.28 ps
54MN	2109.8 *4*	1+	> 416 fs
55MN	0.0	5/2-	STABLE

56MN	0.0	3+	2.5789 h *1*
56MN	2579.90 *16*		> 0.7 ps
57MN	0.0	5/2-	85.4 s *18*
57MN	1227.5 *11*	-	> 0.35 ps
58MN	0.0	1+	3.0 s *1*
58MN	71.77 *5*	4+	65.4 s *5*
59MN	0.0	5/2-	4.59 s *5*
60MN	271.80 *10*	4+	1.77 s *2*
72MN	0		> 620 ns
52FE	0.0	0+	8.275 h *8*
52FE	6958.0 *4*	12+	45.9 s *6*
53FE	0.0	7/2-	8.51 m *2*
53FE	3040.4 *3*	19/2-	2.54 m *2*
54FE	0.0	0+	STABLE
54FE	2561.3 *4*	0+	≥ 1.4 ps
54FE	3294.8 *4*	4+	≥ 2.1 ps
54FE	4030.9 *5*	5+	≥ 0.7 ps
55FE	0.0	3/2-	2.744 y *9*
55FE	3072.0 *4*	11/2-	> 0.7 ps
55FE	3456.9 *5*	13/2-	> 0.6 ps
55FE	5476.8 *23*		> 0.7 ps
56FE	0.0	0+	STABLE
57FE	0.0	1/2-	STABLE
57FE	2220.2	(7/2-)	> 0.3 ps
57FE	2455.55 *15*	9/2+	> 1.4 ps
58FE	0.0	0+	STABLE
58FE	2257.95 *21*	0+	> 2.5 ps
59FE	0.0	3/2-	44.490 d *9*
59FE	3558.88 *23*	(15/2+)	> 0.4 ps
60FE	0.0	0+	$2.62\times10^{+6}$ y *4*
60FE	3958.20 *18*	6(-)	> 0.4 ps
60FE	4296.49 *18*	7(-)	> 0.4 ps
61FE	0.0	(3/2-)	5.98 m *6*
62FE	0.0	0+	68 s *2*
63FE	0.0	(5/2-)	6.1 s *6*
64FE	0.0	0+	2.0 s *4*
65FE	402 *5*	(9/2+)	1.12 s *15*
72FE	0.0	0+	≥ 150 ns
75FE	0.0		> 620 ns
54CO	197.1 *4*	7+	1.48 m *2*
55CO	0.0	7/2-	17.53 h *3*
55CO	3942.09 *11*	1/2-,3/2-	> 120 fs
56CO	0.0	4+	77.236 d *26*
56CO	829.61 *5*	4+	> 1.7 ps
56CO	2282.63 *12*	7+	> 1.25 ps
57CO	0.0	7/2-	271.74 d *6*
58CO	0.0	2+	70.86 d *6*
58CO	24.95 *6*	5+	9.10 h *9*
58CO	1044.26 *10*	(3+)	> 1.2 ps
59CO	0.0	7/2-	STABLE
59CO	2153.62 *20*		≥ 14 fs
59CO	2204.78 *19*	5/2(-)	≥ 0.69 ps
60CO	0.0	5+	1925.28 d *14*
60CO	58.59 *1*	2+	10.467 m *6*
61CO	0.0	7/2-	1.649 h *5*
62CO	0.0	(2)+	1.54 m *10*
62CO	22 *5*	(5)+	13.86 m *9*
63CO	0.0	7/2-	27.4 s *5*
63CO	995.05 *13*	3/2-	> 10 ps
64CO	107 *20*		> 280 ms

65CO	0.0	(7/2)-	1.16 s *3*
66CO	642	(8-)	> 100 µs
68CO	0.0+X	1+	1.6 s *3*
56NI	0.0	0+	6.075 d *10*
56NI	3923.6 *13*	4+	> 0.7 ps
57NI	0.0	3/2-	35.60 h *6*
58NI	0.0	0+	STABLE
58NI	3269.1 *8*	(2)	> 57 fs
58NI	3273.7 *7*	(2)	> 50 fs
58NI	3450.9 *5*		> 11 fs
58NI	3943.6 *12*		> 24 fs
58NI	5359.3 *16*	(2)	> 29 fs
58NI	5452.2 *4*	1	> 13 fs
58NI	5528.0 *4*	(1)	> 7 fs
59NI	0.0	3/2-	$7.6\times10^{+4}$ y *5*
60NI	0.0	0+	STABLE
60NI	2284.80 *4*	0+	> 1.5 ps
60NI	3871.050 *22*	2+	> 3.0 ps
60NI	4077.99 *5*	1+,2+	> 12 fs
61NI	0.0	3/2-	STABLE
61NI	2129.0 *3*	11/2-	> 2 ps
61NI	3426.34 *20*	13/2-	> 0.7 ps
61NI	4019.36 *21*	15/2+	> 1.4 ps
62NI	0.0	0+	STABLE
62NI	2890.63 *20*	0+	> 3.1 ps
62NI	4011.0 *15*		> 0.90 ps
63NI	0.0	1/2-	101.2 y *15*
64NI	0.0	0+	STABLE
64NI	3748.99 *6*	2+	> 0.5 ps
65NI	0.0	5/2-	2.5175 h *5*
66NI	0	0+	54.6 h *3*
67NI	0	(1/2)-	21 s *1*
68NI	0.0	0+	29 s *2*
69NI	0.0	(9/2+)	11.4 s *3*
69NI	321 *2*	(1/2-)	3.5 s *4*
70NI	0.0	0+	6.0 s *3*
71NI	0.0	(9/2+)	2.56 s *3*
71NI	498.5 *6*	(1/2-)	2.3 s *3*
72NI	0.0	0+	1.57 s *5*
58CU	0.0	1+	3.204 s *7*
58CU	1427.85 *25*	2+	> 0.66 ps
58CU	1549.5 *3*	(4+)	> 0.34 ps
58CU	1647.41 *18*	(3+)	> 0.90 ps
59CU	0.0	3/2-	81.5 s *5*
59CU	914.2 *4*	5/2-	> 1.1 ps
60CU	0.0	2+	23.7 m *4*
61CU	0.0	3/2-	3.339 h *8*
61CU	1732.58 *5*	7/2-	> 1.4 ps
61CU	2627.12 *9*	11/2-	> 350 fs
61CU	2720.34 *9*	9/2+	> 2.8 ps
62CU	0.0	1+	9.67 m *3*
62CU	426.18 *6*	3+	> 0.16 ps
62CU	548.31 *5*	1+	> 0.17 ps
63CU	0.0	3/2-	STABLE
63CU	2716.47 *9*	3/2-,5/2-	> 0.2 ps
63CU	2808.10 *8*	3/2-	> 0.18 ps
63CU	5413.0 *3*	(17/2+)	> 2 ps
64CU	0.0	1+	12.7006 h *20*
65CU	0	3/2-	STABLE
65CU	2094.34 *14*	(7/2)-	> 1 ps

65CU	2278.5 *9*	(7/2)-	> 0.84 fs
66CU	0.0	1+	5.120 m *14*
67CU	0	3/2-	61.83 h *12*
68CU	0.0	1+	30.9 s *6*
68CU	721.26 *8*	6-	3.75 m *5*
69CU	0.0	3/2-	2.85 m *15*
70CU	0.0	6-	44.5 s *2*
70CU	101.1 *3*	3-	33 s *2*
70CU	242.6 *5*	1+	6.6 s *2*
71CU	0.0	3/2(-)	19.4 s *16*
72CU	0.0	(2)	6.63 s *3*
73CU	0.0	3/2-	4.2 s *3*
74CU	0.0	2-	1.63 s *5*
75CU	0.0	5/2(-)	1.224 s *3*
76CU	0+X		1.27 s *30*
60ZN	0.0	0+	2.38 m *5*
61ZN	0.0	3/2-	89.1 s *2*
62ZN	0.0	0+	9.193 h *15*
62ZN	5131.0 *4*	(6-)	> 0.7 ps
63ZN	0	3/2-	38.47 m *5*
63ZN	637.07 *6*	3/2-	> 0.53 ps
63ZN	650.10 *4*	5/2-	> 0.28 ps
63ZN	1023.22 *5*	3/2-	> 3.5 ps
63ZN	1063.34 *7*	7/2-	> 0.29 ps
63ZN	1065.28 *12*	1/2-	> 0.22 ps
63ZN	1206.38 *7*	7/2-	> 0.42 ps
63ZN	1284.26 *6*	5/2-	> 0.40 ps
63ZN	1909.26 *14*	1/2,3/2-	> 0.28 ps
63ZN	2050.42 *19*	9/2-	> 0.31 ps
63ZN	2233.30 *23*	11/2-	> 1.4 ps
63ZN	2288.31 *17*	7/2-	> 0.21 ps
63ZN	2377.86 *24*	9/2+	> 1.39 ps
63ZN	2911.9 *5*	9/2	> 1.4 ps
64ZN	0.0	0+	STABLE
64ZN	3552.3 *3*	4+	> 1.0 ps
64ZN	3853.27 *21*	5+	> 2 ps
65ZN	0.0	5/2-	243.93 d *9*
65ZN	2053.8 *3*	13/2+	> 1.4 ps
65ZN	2135.2 *8*	9/2+	> 1.4 ps
65ZN	3784.9 *6*	(17/2)+	≥ 0.28 ps
66ZN	0.0	0+	STABLE
66ZN	2372.353 *4*	0+	> 0.21 ps
66ZN	2765.56 *7*	4+	> 7 ps
66ZN	5207.3 *5*	(8+)	> 6 ps
67ZN	0.0	5/2-	STABLE
67ZN	393.531 *7*	3/2-	> 2.4 ps
67ZN	1807.89 *14*	9/2+	> 0.7 ps
68ZN	0.0	0+	STABLE
69ZN	0	1/2-	56.4 m *9*
69ZN	438.636 *18*	9/2+	13.756 h *18*
70ZN	0.0	0+	≥ 3.8×10^{18} y
71ZN	0.0	1/2-	2.42 m *10*
71ZN	155.62 *6*	9/2+	4.140 h *15*
71ZN	468.4 *8*	5/2-	≥ 20 ps
72ZN	0.0	0+	46.5 h *1*
73ZN	0.0	1/2-	24.5 s *2*
74ZN	0.0	0+	95.6 s *12*
75ZN	0.0	(7/2+)	10.2 s *2*
76ZN	0.0	0+	5.7 s *3*
77ZN	0.0	7/2+	2.08 s *5*

77ZN	772.440 *15*	1/2-	1.05 s *10*
78ZN	0.0	0+	1.47 s *15*
79ZN	110E1 *15*	1/2+	≥ 200 ms
85ZN	0		> 637 ns
63GA	0.0	3/2-	32.4 s *5*
64GA	0.0	0+	2.627 m *12*
65GA	0.0	3/2-	15.2 m *2*
66GA	0.0	0+	9.49 h *3*
67GA	0	3/2-	3.2617 d *5*
67GA	1975.2 *11*		> 0.09 ps
67GA	2141.85 *8*	3/2-	≥ 0.25 ps
67GA	2374.2 *3*	3/2+,7/2+	> 0.69 ps
67GA	2457.3 *10*	11/2-	> 1.04 ps
67GA	2653.4 *9*	11/2-	> 1.04 ps
67GA	3191.1 *9*	11/2+	> 1.04 ps
67GA	3525.3 *4*	9/2+,13/2+	> 1.04 ps
67GA	3628.6 *7*	13/2+,17/2+	> 0.48 ps
68GA	0.0	1+	67.71 m *8*
69GA	0.0	3/2-	STABLE
69GA	1525.76 *4*	3/2-	≥ 0.55 ps
69GA	1924.25 *4*	7/2-	≥ 0.62 ps
69GA	1972.37 *5*	9/2(+)	≥ 2.8 ps
69GA	2219.29 *19*		≥ 0.21 ps
69GA	2353.30 *24*	5/2	≥ 0.17 ps
69GA	2428.68 *21*	5/2-,7/2-	≥ 1.7 ps
69GA	2668.28 *6*	11/2	≥ 1.7 ps
69GA	2717.99 *5*	13/2(+)	≥ 1.4 ps
69GA	4528.10 *14*	(17/2,19/2)	≥ 2.8 ps
70GA	0.0	1+	21.14 m *5*
70GA	1203.83 *20*	2+	> 220 fs
70GA	1244.61 *10*	2	> 500 fs
71GA	0.0	3/2-	STABLE
71GA	1476.004 *8*	5/2-	> 0.6 ps
71GA	1699.21 *8*	1/2+	> 0.25 ps
72GA	0	3-	14.10 h *2*
73GA	0.0	1/2-	4.86 h *3*
74GA	0.0	(3-)	8.12 m *12*
74GA	59.571 *14*	(0+)	9.5 s *10*
75GA	0.0	3/2-	126 s *2*
76GA	0.0	2(-)	30.5 s *4*
77GA	0.0	3/2(-)	13.2 s *2*
78GA	0.0	(3+)	5.09 s *5*
79GA	0.0	3/2(-)	2.848 s *3*
80GA	0	6(-)	1.9 s *1*
80GA	22.4	3(-)	1.3 s *2*
81GA	0	(5/2-)	1.217 s *5*
87GA	0		> 634 ns
60GE	0	0+	> 110 ns
64GE	0.0	0+	63.7 s *25*
65GE	0.0	3/2-	30.9 s *5*
66GE	0.0	0+	2.26 h *5*
66GE	3736.80 *12*	5+	> 2 ps
66GE	6502.11 *16*	10+	> 1.4 ps
67GE	0	1/2-	18.9 m *3*
68GE	0	0+	270.93 d *13*
68GE	4999		> 0.35 ps
69GE	0	5/2-	39.05 h *10*
69GE	1613.29 *8*	7/2-	> 0.69 ps
69GE	1920.28 *7*	9/2-	> 1.04 ps
70GE	0.0	0+	STABLE

70GE	4851.9 *4*	(8-)	> 3 ps
71GE	0.0	1/2-	11.43 d *3*
71GE	708.196 *7*	3/2-	> 10.7 ps
71GE	1026.561 *10*	5/2-	> 1.2 ps
71GE	1212.511 *8*	5/2-	> 1.2 ps
72GE	0	0+	STABLE
72GE	2064.93 *3*	3+	≥ 2 ps
72GE	3667.26 *23*	6+	> 2.1 ps
72GE	3784.18 *17*	7-	≥ 2.8 ps
73GE	0.0	9/2+	STABLE
74GE	0.0	0+	STABLE
75GE	0.0	1/2-	82.78 m *4*
75GE	139.69 *3*	7/2+	47.7 s *5*
76GE	0.0	0+	1.926×10^{21} y *94*
77GE	0.0	7/2+	11.211 h *3*
77GE	159.71 *6*	1/2-	53.7 s *6*
78GE	0.0	0+	88.0 m *10*
79GE	0.0	(1/2)-	18.98 s *3*
79GE	185.95 *4*	(7/2+)	39.0 s *10*
80GE	0.0	0+	29.5 s *4*
81GE	0	(9/2+)	7.6 s *6*
81GE	679.14 *4*	(1/2+)	7.6 s *6*
82GE	0.0	0+	4.0 s *7*
83GE	0.0	(5/2)+	1.85 s *6*
88GE	0.0	0+	> 300 ns
67AS	0	(5/2-)	42.5 s *12*
68AS	0.0	3+	151.6 s *8*
69AS	0.0	5/2-	15.2 m *2*
70AS	0.0	4+	52.6 m *3*
71AS	0.0	5/2-	65.30 h *7*
71AS	1394.69 *12*	(9/2)-	> 1.4 ps
71AS	2469.92 *12*	(13/2-)	> 1.4 ps
71AS	2820.1 *3*	(13/2-)	> 1.4 ps
71AS	2920.91 *15*	(15/2-)	> 1.4 ps
71AS	5822.9 *4*	(23/2-)	> 1.4 ps
72AS	0	2-	26.0 h *1*
73AS	0.0	3/2-	80.30 d *6*
74AS	0.0	2-	17.77 d *2*
75AS	0.0	3/2-	STABLE
76AS	0.0	2-	26.254 h *11*
77AS	0.0	3/2-	38.79 h *5*
78AS	0.0	2-	90.7 m *2*
79AS	0.0	3/2-	9.01 m *15*
80AS	0.0	1+	15.2 s *2*
81AS	0	3/2-	33.3 s *8*
82AS	0	(2-)	19.1 s *5*
82AS	131.6 *5*	(5-)	13.6 s *4*
83AS	0.0	(5/2-)	13.4 s *4*
84AS	0.0	(3-)	4.2 s *5*
85AS	0	(3/2-)	2.021 s *12*
68SE	0	0+	35.5 s *7*
69SE	0.0	1/2-	27.4 s *2*
70SE	0.0	0+	41.1 m *3*
71SE	0.0	(5/2-)	4.74 m *5*
72SE	0	0+	8.40 d *8*
73SE	0.0	9/2+	7.15 h *9*
73SE	25.71 *4*	3/2-	39.8 m *17*
74SE	0.0	0+	STABLE
75SE	0.0	5/2+	119.78 d *5*
76SE	0.0	0+	STABLE

77SE	0.0	1/2-	STABLE
77SE	161.9223 *10*	7/2+	17.36 s *5*
77SE	1230.629 *5*	(5/2)-	> 0.21 ps
77SE	1364.273 *4*	(3/2-)	> 0.49 ps
77SE	1607.702 *8*	3/2+,5/2+	> 0.42 ps
78SE	0.0	0+	STABLE
78SE	2949.19 *16*	4-	> 1.4 ps
78SE	4121.2 *3*	8+	> 0.7 ps
78SE	4214.1 *4*	(8-)	> 1.4 ps
78SE	4786.9 *5*	(10+)	> 1.4 ps
78SE	5783.8 *7*	(12+)	> 0.6 ps
79SE	0.0	7/2+	$3.27\times10^{+5}$ y *28*
79SE	95.77 *3*	1/2-	3.92 m *1*
79SE	1312.0 *3*	(7/2-)	> 0.21 ps
80SE	0.0	0+	STABLE
81SE	0	1/2-	18.45 m *12*
81SE	103.00 *6*	7/2+	57.28 m *2*
82SE	0	0+	$9.6\times10^{+19}$ y *10*
82SE	2893.66 *18*	5-	> 131.7 ps
83SE	0.0	9/2+	22.3 m *2*
83SE	228.92 *7*	1/2-	70.1 s *4*
84SE	0.0	0+	3.26 m *10*
85SE	0	(5/2)+	32.9 s *3*
86SE	0.0	0+	14.3 s *3*
87SE	0.0	(3/2+)	5.50 s *14*
88SE	0.0	0+	1.53 s *6*
94SE	0.0	0+	> 150 ns
95SE	0		> 392 ns
70BR	2292.3 *8*	9+	2.2 s *2*
71BR	0.0	(5/2)-	21.4 s *6*
72BR	0	1+	78.6 s *24*
72BR	100.76 *15*	(3-)	10.6 s *3*
73BR	0.0	1/2-	3.4 m *2*
74BR	0.0	(0-)	25.4 m *3*
74BR	13.58 *21*	4(+)	46 m *2*
75BR	0.0	3/2-	96.7 m *13*
76BR	0.0	1-	16.14 h *20*
76BR	102.578 *28*	(4)+	1.31 s *2*
77BR	0.0	3/2-	57.04 h *12*
77BR	105.86 *8*	9/2+	4.28 m *10*
78BR	0.0	1+	6.45 m *4*
79BR	0.0	3/2-	STABLE
79BR	207.61 *9*	9/2+	4.85 s *4*
80BR	0.0	1+	17.68 m *2*
80BR	85.843 *4*	5-	4.4205 h *8*
81BR	0.0	3/2-	STABLE
82BR	0	5-	35.282 h 7
82BR	45.9492 *10*	2-	6.13 m *5*
83BR	0.0	3/2-	2.374 h *4*
84BR	0	2-	31.76 m *8*
84BR	3.2E+2 *10*	(6)-	6.0 m *2*
85BR	0.0	3/2-	2.90 m *6*
86BR	0	(1-)	55.1 s *4*
87BR	0.0	(5/2-)	55.68 s *12*
88BR	0.0	(2-)	16.34 s *8*
89BR	0	(5/2-)	4.357 s *22*
90BR	0		1.91 s *1*
95BR	0.0		≥ 150 ns
96BR	0.0		≥ 150 ns
72KR	0.0	0+	17.1 s *2*

73KR	0.0	(3/2)-	27.3 s *10*
74KR	0.0	0+	11.50 m *11*
75KR	0.0	5/2+	4.60 m 7
76KR	0.0	0+	14.79 h *5*
77KR	0.0	5/2+	71.25 m *42*
78KR	0.0	0+	STABLE
78KR	3791.7 *5*		> 0.7 ps
79KR	0.0	1/2-	35.04 h *10*
79KR	129.77 *5*	7/2+	50 s *3*
80KR	0.0	0+	STABLE
80KR	3635.3 *4*	(7+)	≥ 0.7 ps
80KR	4126.23 *20*	(8-)	≥ 1.7 ps
81KR	0.0	7/2+	$2.29\times10^{+5}$ y *11*
81KR	190.64 *4*	1/2-	13.10 s *3*
81KR	2192.4 *4*	(15/2+)	> 2.1 ps
82KR	0.0	0+	STABLE
82KR	3595.14 *9*	(7-)	> 7 ps
83KR	0.0	9/2+	STABLE
83KR	41.5575 *7*	1/2-	1.83 h *2*
84KR	0.0	0+	STABLE
85KR	0.0	9/2+	10.739 y *14*
85KR	304.871 *20*	1/2-	4.480 h *8*
86KR	0	0+	STABLE
87KR	0.0	5/2+	76.3 m *5*
88KR	0.0	0+	2.825 h *19*
89KR	0.0	3/2(+)	3.15 m *4*
90KR	0.0	0+	32.32 s *9*
91KR	0	5/2(+)	8.57 s *4*
92KR	0.0	0+	1.840 s *8*
93KR	0	1/2+	1.286 s *10*
101KR	0		> 635 ns
75RB	0	3/2(-)	19.0 s *12*
76RB	0.0	1-	36.5 s *6*
77RB	0.0	3/2-	3.78 m *4*
78RB	0.0	0(+)	17.66 m *3*
78RB	111.19 *22*	4(-)	5.74 m *3*
79RB	0.0	5/2+	22.9 m *5*
80RB	0.0	1+	33.4 s 7
81RB	0.0	3/2-	4.572 h *4*
81RB	86.31 *7*	9/2+	30.5 m *3*
81RB	2656.2 *6*	(17/2-)	> 1 ps
81RB	3496.8 *10*	(21/2-)	> 1 ps
82RB	0	1+	1.2575 m *2*
82RB	69.0 *15*	5-	6.472 h *6*
83RB	0.0	5/2-	86.2 d *1*
83RB	42.0780 *20*	9/2+	> 0.3 ms
84RB	0	2-	32.82 d *7*
84RB	463.59 *8*	6-	20.26 m *4*
85RB	0.0	5/2-	STABLE
85RB	3054.56 *15*	(21/2-)	> 69 ps
85RB	5419.30 *19*	(27/2+)	> 7 ps
86RB	0.0	2-	18.642 d *18*
86RB	556.05 *18*	6-	1.017 m *3*
87RB	0.0	3/2-	$4.97\times10^{+10}$ y *3*
88RB	0.0	2-	17.773 m *18*
89RB	0	3/2-	15.32 m *10*
90RB	0	0-	158 s *5*
90RB	106.90 *3*	3-	258 s *4*
91RB	0	3/2(-)	58.2 s *3*
92RB	0.0	0-	4.48 s *3*

93RB	0	5/2-	5.84 s *2*
94RB	0.0	3(-)	2.702 s *5*
76SR	0.0	0+	7.89 s *7*
77SR	0.0	5/2(+)	9.0 s *2*
78SR	0.0	0+	160 s *8*
79SR	0.0	3/2(-)	2.25 m *10*
80SR	0.0	0+	106.3 m *15*
80SR	3580.81 *25*	(7-)	> 21 ps
80SR	3602.64 *24*	(7-)	> 21 ps
81SR	0.0	1/2-	22.3 m *4*
81SR	1470.5 *5*	(13/2+)	≥ 0.76 ps
81SR	1910.2 *10*	(15/2-)	≥ 1.2 ps
82SR	0	0+	25.35 d *3*
83SR	0.0	7/2+	32.41 h *3*
83SR	259.15 *9*	1/2-	4.95 s *12*
84SR	0.0	0+	STABLE
85SR	0.0	9/2+	64.849 d *7*
85SR	238.79 *5*	1/2-	67.63 m *4*
85SR	767.34 *8*	5/2+	> 7 ps
85SR	1355.15 *9*	5/2+	≥ 0.13 ps
85SR	1555.35 *10*	(5/2+,7/2)	≥ 0.11 ps
85SR	3227.2 *4*	(21/2)-	> 2.8 ps
86SR	0.0	0+	STABLE
87SR	0.0	9/2+	STABLE
87SR	388.5287 *23*	1/2-	2.815 h *12*
87SR	2169.43 *2*	1/2+	≥ 0.15 ps
88SR	0	0+	STABLE
88SR	3992.42 *7*	(0+)	> 0.48 ps
88SR	5498.7 *11*	(1,2+)	> 0.7 ps
88SR	5583.3 *3*		> 3.3 ps
88SR	5730.18 *20*	4+	> 0.2 ps
88SR	5831.5 *5*	(1,2+)	> 1 ps
88SR	6052.2 *3*	(2+)	> 1.1 ps
88SR	6101.4 *3*	(1,2+)	> 0.8 ps
89SR	0.0	5/2+	50.563 d *25*
89SR	1032.00 *4*	1/2+	> 1 ps
89SR	3388.1 *7*	15/2-	> 7 ps
90SR	0.0	0+	28.91 y *3*
91SR	0	5/2+	9.65 h *6*
92SR	0.0	0+	2.611 h *17*
93SR	0	5/2+	7.43 m *3*
94SR	0.0	0+	75.3 s *2*
95SR	0.0	1/2+	23.90 s *14*
96SR	0.0	0+	1.07 s *1*
107SR	0		> 395 ns
78Y	0+X	(5+)	5.8 s *6*
79Y	0.0	(5/2+)	14.8 s *6*
80Y	0	(4-)	30.1 s *5*
80Y	228.5 *1*	(1-)	4.8 s *3*
81Y	0	(5/2+)	70.4 s *10*
81Y	1482.69 *17*	(15/2+)	> 0.7 ps
81Y	2594.5 *6*	(17/2-)	> 0.69 ps
82Y	0	1+	8.30 s *20*
83Y	0.0	9/2+	7.08 m *8*
83Y	62.04 *10*	3/2-	2.85 m *2*
84Y	0.0	(6+)	39.5 m *8*
84Y	67.0 *2*	1+	4.6 s *2*
85Y	0.0	(1/2)-	2.68 h *5*
85Y	19.68 *17*	(9/2)+	4.86 h *20*
86Y	0.0	4-	14.74 h *2*

86Y	218.21 *9*	(8+)	47.4 m *4*
87Y	0.0	1/2-	79.8 h *3*
87Y	380.82 *7*	9/2+	13.37 h *3*
87Y	5759.59 *24*	(27/2-)	> 2.1 ps
88Y	0.0	4-	106.626 d *21*
88Y	706.79 *13*	2-	> 10 ps
89Y	0.0	1/2-	STABLE
89Y	908.97 *3*	9/2+	15.663 s *5*
89Y	4825.38 *17*	17/2+	≥ 3.5 ps
90Y	0.0	2-	64.05 h *5*
90Y	682.01 *5*	7+	3.19 h *6*
91Y	0	1/2-	58.51 d *6*
91Y	555.58 *5*	9/2+	49.71 m *4*
92Y	0.0	2-	3.54 h *1*
93Y	0.0	1/2-	10.18 h *8*
94Y	0.0	2-	18.7 m *1*
95Y	0.0	1/2-	10.3 m *1*
96Y	0	0-	5.34 s *5*
96Y	1140 *30*	8+	9.6 s *2*
97Y	0.0	(1/2-)	3.75 s *3*
97Y	667.52 *23*	(9/2)+	1.17 s *3*
98Y	465.7 *7*	(7+,6+)	2.32 s *8*
99Y	0.0	(5/2+)	1.484 s *7*
78ZR	0	0+	> 170 ns
80ZR	0.0	0+	4.6 s *6*
81ZR	0.0	(3/2-)	5.5 s *4*
82ZR	0.0	0+	32 s *5*
83ZR	0.0	(1/2-)	42 s *2*
84ZR	0	0+	25.8 m *5*
85ZR	0.0	(7/2+)	7.86 m *4*
85ZR	292.2 *3*	(1/2-)	10.9 s *3*
86ZR	0.0	0+	16.5 h *1*
87ZR	0.0	9/2+	1.68 h *1*
87ZR	335.84 *19*	1/2-	14.0 s *2*
88ZR	0.0	0+	83.4 d *3*
88ZR	9912.6 *5*	(19-)	> 0.7 ps
89ZR	0.0	9/2+	78.41 h *12*
89ZR	587.82 *10*	1/2-	4.161 m *10*
89ZR	1094.91 *18*	3/2-	> 0.05 ps
89ZR	1451.23 *18*	5/2-	> 3.5 ps
89ZR	2085.9 *8*	(5/2)+	> 2 ps
89ZR	3111.20 *9*	(19/2)+	> 2.8 ps
89ZR	5381.0 *4*	(27/2)+	> 0.7 ps
90ZR	0	0+	STABLE
90ZR	3448.230 *14*	6+	> 1.46 ps
91ZR	0.0	5/2+	STABLE
91ZR	2170.15 *15*	(11/2)-	> 5.5 ps
92ZR	0.0	0+	STABLE
92ZR	2066.65 *5*	2+	> 0.76 ps
92ZR	2743.55 *7*	4-	> 2.63 ps
93ZR	0.0	5/2+	$1.61\times10^{+6}$ y *5*
94ZR	0.0	0+	STABLE
95ZR	0.0	5/2+	64.032 d *6*
96ZR	0.0	0+	$2.0\times10^{+19}$ y *4*
96ZR	3082.36 *3*	4+	> 1.4 ps
96ZR	3150.28 *3*	3-	> 0.54 ps
96ZR	3243.61 *7*		> 0.097 ps
96ZR	3448.72 *8*	(2+)	> 0.66 ps
96ZR	3749.38 *10*	4+	> 0.26 ps
97ZR	0.0	1/2+	16.749 h *8*

98ZR	0.0	0+	30.7 s *4*
99ZR	0.0	(1/2+)	2.1 s *1*
100ZR	0.0	0+	7.1 s *4*
101ZR	0	(3/2+)	2.3 s *1*
102ZR	0	0+	2.9 s *2*
103ZR	0.0	(5/2-)	1.3 s *1*
104ZR	0.0	0+	1.2 s *3*
83NB	0.0	(5/2+)	3.9 s *2*
84NB	0.0	(1+,2+,3+)	9.8 s *9*
85NB	0.0	(9/2+)	20.5 s *12*
85NB	0+Z		12 s *5*
85NB	69+Y	(1/2-,3/2-)	3.3 s *9*
86NB	0.0	(6+)	88 s *1*
86NB	0+Y		56 s *8*
87NB	0	(1/2)-	3.7 m *1*
87NB	3.9 *1*	(9/2)+	2.6 m *1*
88NB	0.0	(8+)	14.50 m *11*
88NB	0.0+X	(4-)	7.7 m *1*
89NB	0.0	(9/2+)	2.03 h *7*
89NB	<35	(1/2)-	66 m *2*
90NB	0	8+	14.60 h *5*
90NB	124.67 *25*	4-	18.91 s *6*
91NB	0.0	9/2+	$6.8\times10^{+2}$ y *13*
91NB	104.60 *5*	1/2-	60.86 d *22*
91NB	1790.63 *9*	(9/2-)	> 1.6 ps
91NB	1844.93 *13*	(5/2)-	> 1.5 ps
91NB	2120.87 *15*	(7/2-)	> 1.0 ps
92NB	0.0	7+	$3.47\times10^{+7}$ y *24*
92NB	135.5 *4*	(2)+	10.15 d *2*
93NB	0.0	9/2+	STABLE
93NB	30.77 *2*	1/2-	16.12 y *12*
93NB	810.32 *9*	5/2-	> 1.0 ps
93NB	1082.68 *5*	9/2+	> 2.8 ps
93NB	1369.86 *17*	5/2-	> 0.55 ps
93NB	1395.42 *13*	(7/2-)	> 0.55 ps
93NB	1588.06 *17*	3/2(-),5/2(-)	> 0.87 ps
93NB	2002.52 *10*	(11/2+)	> 0.55 ps
94NB	0.0	6+	$2.03\times10^{+4}$ y *16*
94NB	40.892 *12*	3+	6.263 m *4*
95NB	0.0	9/2+	34.991 d *6*
95NB	235.69 *2*	1/2-	3.61 d *3*
96NB	0	6+	23.35 h *5*
97NB	0.0	9/2+	72.1 m *7*
97NB	743.35 *3*	1/2-	58.7 s *18*
98NB	0	1+	2.86 s *6*
98NB	84 *4*	(5)+	51.1 m *4*
99NB	0.0	9/2+	15.0 s *2*
99NB	365.27 *8*	1/2-	2.5 m *2*
100NB	0.0	1+	1.4 s *2*
100NB	314 *23*	(5)+	2.99 s *11*
101NB	0.0	(5/2+)	7.1 s *3*
102NB	0.0	(4+)	4.3 s *4*
102NB	0.0+X	1+	1.3 s *2*
103NB	0.0	(5/2+)	1.5 s *2*
104NB	0.0	(1+)	4.9 s *3*
105NB	0	(5/2+)	2.91 s *5*
106NB	0.0	(1-)	1.02 s *5*
81MO	0		> 450 ns
84MO	0.0	0+	2.3 s *3*
85MO	0.0	(1/2-)	3.2 s *2*

86MO	0.0	0+	19.1 s *3*
87MO	0.0	(7/2+)	14.1 s *3*
88MO	0.0	0+	8.0 m *2*
89MO	0.0	(9/2+)	2.11 m *10*
90MO	0.0	0+	5.56 h *9*
91MO	0	9/2+	15.49 m *1*
91MO	653.01 *9*	1/2-	64.6 s *6*
92MO	0.0	0+	STABLE
92MO	2282.61 *5*	4+	> 3.4 ps
92MO	2519.53 *21*	0+	> 3.4 ps
92MO	3368.68 *7*	(4+)	> 3.4 ps
92MO	3579.81 *6*	3-	> 0.21 ps
92MO	3621.06 *7*	(LE4)	> 0.21 ps
92MO	3688.77 *7*	1(-),2,3	> 0.69 ps
92MO	3814.58 *8*	2,3	> 0.48 ps
92MO	3841.87 *12*	0+	> 0.21 ps
92MO	3963.19 *16*	4+	> 0.21 ps
93MO	0	5/2+	$4.0\times10^{+3}$ y *8*
93MO	2424.95 *4*	21/2+	6.85 h 7
93MO	2667.95 *7*	(13/2+)	> 0.30 ps
93MO	2755.27 *8*	(11/2-)	> 0.54 ps
93MO	3048.23 *10*	(9/2-)	> 38 fs
93MO	3068.86 *12*	(13/2+)	> 0.125 ps
94MO	0.0	0+	STABLE
95MO	0.0	5/2+	STABLE
96MO	0.0	0+	STABLE
96MO	1625.905 *16*	2+	> 0.90 ps
96MO	1978.450 *14*	3+	> 2.29 ps
96MO	2219.425 *14*	4+	> 0.38 ps
96MO	2234.63 *4*	3-	> 0.277 ps
96MO	2438.477 *15*	5+	> 0.139 ps
96MO	2440.76 *3*	6+	> 0.208 ps
96MO	2481.06 *6*	(4)+	> 1.01 ps
96MO	2611.51 *10*		> 0.194 ps
96MO	2734.57 *6*	(4,5)+	> 0.25 ps
96MO	2755.08 *3*	6+	> 0.194 ps
96MO	2790.21 *6*	(2,4)	> 0.68 ps
96MO	3416.82 *6*	4+	> 0.61 ps
96MO	3623.19 *10*	(3+)	> 0.236 ps
97MO	0.0	5/2+	STABLE
98MO	0.0	0+	STABLE
99MO	0.0	1/2+	65.924 h *6*
100MO	0.0	0+	$7.01\times10^{+18}$ y *+21-17*
101MO	0.0	1/2+	14.61 m *3*
102MO	0.0	0+	11.3 m *2*
103MO	0.0	(3/2+)	67.5 s *15*
104MO	0.0	0+	60 s *2*
105MO	0.0	(5/2-)	36.3 s *8*
106MO	0.0	0+	8.73 s *12*
107MO	0.0	(5/2+)	3.5 s *5*
108MO	0.0	0+	1.09 s *2*
87TC	0	(9/2+)	2.2 s *2*
88TC	X	(5+,6+,7+)	6.4 s *8*
88TC	Y	(2+,3+)	5.8 s *2*
89TC	0.0	(9/2+)	12.8 s *9*
89TC	62.6 *5*	(1/2-)	12.9 s *8*
90TC	0	(8+)	49.2 s *4*
90TC	144.1 *17*	1+	8.7 s *2*
91TC	0	(9/2)+	3.14 m *2*
91TC	139.3 *3*	(1/2)-	3.3 m *1*

92TC	0.0	(8)+	4.25 m *15*
93TC	0.0	9/2+	2.75 h *5*
93TC	391.84 *8*	1/2-	43.5 m *10*
94TC	0.0	7+	293 m *1*
94TC	76 *3*	(2)+	52.0 m *10*
95TC	0.0	9/2+	20.0 h *1*
95TC	38.91 *4*	1/2-	61 d *2*
95TC	927.81 *3*	3/2+	≥ 589 fs
95TC	1084.97 *4*	(5/2)+	≥ 347 fs
95TC	1214.55 *4*	9/2-	≥ 624 fs
95TC	1416.41 *5*	3/2,5/2(-)	≥ 492 fs
95TC	1958.98 *10*	(5/2-)	≥ 596 fs
95TC	2212.90 *13*	(17/2-)	≥ 1.4 ps
95TC	3516.0 *3*	25/2+	> 5 ps
96TC	0.0	7+	4.28 d 7
96TC	34.23 *4*	4+	51.5 m *10*
97TC	0.0	9/2+	$4.21\times10^{+6}$ y *16*
97TC	96.57 *6*	1/2-	91.0 d *6*
97TC	656.90 *6*	5/2-	≥ 0.76 ps
97TC	772.68 *6*	13/2+	≥ 0.35 ps
97TC	832.80 *6*	11/2(+)	≥ 0.35 ps
97TC	855.45 *3*	7/2+	≥ 0.37 ps
97TC	861.90 *8*	(9/2+)	≥ 0.38 ps
97TC	1049.22 *7*	3/2-	≥ 0.21 ps
97TC	1240.02 *7*	(7/2-)	≥ 0.26 ps
97TC	1441.1 *10*		≥ 0.21 ps
97TC	1733.3 *4*	(3/2+,5/2,7/2-)	≥ 0.54 ps
98TC	0.0	(6)+	$4.2\times10^{+6}$ y *3*
99TC	0.0	9/2+	$2.111\times10^{+5}$ y *12*
99TC	142.6836 *11*	1/2-	6.0072 h *9*
100TC	0.0	1+	15.65 s *12*
101TC	0.0	9/2+	14.22 m *1*
102TC	0	1+	5.28 s *15*
102TC	0.0+X	(4,5)	4.35 m 7
103TC	0.0	5/2+	54.2 s *8*
104TC	0	(3+)	18.3 m *3*
105TC	0.0	(3/2-)	7.64 m *6*
106TC	0.0	(1,2)	35.6 s *6*
107TC	0.0	(3/2-)	21.2 s *2*
108TC	0.0	(2)+	5.17 s 7
85RU	0		> 450 ns
86RU	0	0+	> 438 ns
88RU	0.0	0+	1.2 s *+3-2*
89RU	0	(9/2+)	1.32 s *3*
90RU	0.0	0+	11.7 s *9*
91RU	0.0	(9/2+)	8.0 s *4*
91RU	0.0+X	(1/2-)	7.6 s *8*
92RU	0.0	0+	3.65 m *5*
93RU	0	(9/2)+	59.7 s *6*
93RU	734.40 *10*	(1/2)-	10.8 s *3*
94RU	0.0	0+	51.8 m *6*
95RU	0.0	5/2+	1.643 h *13*
96RU	0.0	0+	STABLE
96RU	2588.41 *8*	5-	≥ 2.8 ps
97RU	0.0	5/2+	2.83 d *23*
98RU	0.0	0+	STABLE
99RU	0.0	5/2+	STABLE
99RU	3982.8 *3*	(23/2)-	> 0.9 ps
100RU	0.0	0+	STABLE
100RU	1741.011 *8*	0+	> 1.39 ps

100RU	2075.675 *15*	6+	> 0.28 ps
100RU	2387.22 *7*	0+	> 0.52 ps
100RU	2493.06 *4*	(3,4,5+)	> 0.83 ps
100RU	2569.912 *7*	(3)-	> 0.30 ps
100RU	2576.872 *15*	5(+)	> 125 fs
100RU	2764.943 *18*	2+,3+	> 0.17 ps
100RU	3069.525 *6*	(1,2)-	> 0.45 ps
100RU	3110.57 *11*	(2+,3+)	> 0.26 ps
101RU	0.0	5/2+	STABLE
101RU	422.22 *3*	3/2+	≥ 1.4 ps
101RU	1622.3 *5*	19/2-	> 1.2 ps
101RU	1862.4 *4*	15/2+	> 1.7 ps
101RU	2173.9 *5*	17/2+	> 1.4 ps
102RU	0	0+	STABLE
103RU	0.0	3/2+	39.247 d *13*
104RU	0.0	0+	STABLE
105RU	0.0	3/2+	4.439 h *11*
106RU	0.0	0+	371.8 d *18*
107RU	0.0	(5/2)+	3.75 m *5*
108RU	0.0	0+	4.55 m *5*
109RU	0.0	(5/2+)	34.4 s *2*
110RU	0.0	0+	12.04 s *17*
111RU	0.0	5/2+	2.12 s *7*
112RU	0.0	0+	1.75 s *7*
91RH	0.0	(9/2+)	1.47 s *22*
91RH	172.9 *4*	(1/2-)	1.46 s *11*
92RH	0.0	(GE6+)	4.66 s *25*
93RH	0.0	(9/2+)	12.2 s *7*
94RH	0.0	(4+)	70.6 s *6*
94RH	X+0.0	(8+)	25.8 s *2*
95RH	0.0	9/2+	5.02 m *10*
95RH	543.3 *3*	(1/2)-	1.96 m *4*
96RH	0.0	6+	9.90 m *10*
96RH	51.98 *9*	3+	1.51 m *2*
97RH	0.0	9/2+	30.7 m *6*
97RH	258.76 *18*	1/2-	46.2 m *16*
98RH	0.0	(2)+	8.72 m *12*
98RH	56.3 *10*	(5+)	3.6 m *2*
99RH	0.0	1/2-	16.1 d *2*
99RH	64.4 *5*	9/2+	4.7 h *1*
100RH	0.0	1-	20.5 h *3*
100RH	107.59 *20*	(5+)	4.6 m *2*
101RH	0.0	1/2-	3.3 y *3*
101RH	157.32 *3*	9/2+	4.34 d *1*
102RH	0.0	(1-,2-)	207.3 d *17*
102RH	140.73 *9*	6(+)	3.742 y *10*
103RH	0.0	1/2-	STABLE
103RH	39.753 *6*	7/2+	56.114 m *9*
104RH	0.0	1+	42.3 s *4*
104RH	128.9679 *5*	5+	4.34 m *3*
105RH	0.0	7/2+	35.341 h *19*
105RH	129.742 *4*	1/2-	42.8 s *3*
106RH	0.0	1+	30.07 s *35*
106RH	137 *13*	(6)+	131 m *2*
107RH	0.0	7/2+	21.7 m *4*
107RH	268.36 *4*	1/2-	> 10 μs
108RH	0.0	1+	16.8 s *5*
108RH	0.0+X	(5+)	6.0 m *3*
109RH	0.0	7/2+	80.8 s *7*
110RH	0.0	(1+)	3.35 s *12*

110RH	0.0+Y	(6+)	28.0 s *13*
111RH	0.0	(7/2+)	11 s *1*
112RH	0.0	(1+)	3.6 s *3*
112RH	0.0+Y	(6+)	6.76 s *12*
113RH	0.0	(7/2+)	2.80 s *12*
114RH	0.0	1+	1.85 s *5*
114RH	0.0+X *3*	(7-)	1.85 s *5*
115RH	0.0	(7/2+)	0.99 s *5*
122RH	0		> 300 ns
92PD	0.0	0+	1.0 s *+3-2*
93PD	0.0	(9/2+)	1.00 s *9*
94PD	0	0+	9.0 s *5*
95PD	0.0	(9/2+)	5 s *3*
95PD	1875.13 *14*	(21/2+)	13.3 s *3*
96PD	0.0	0+	122 s *2*
97PD	0.0	(5/2+)	3.10 m *9*
98PD	0.0	0+	17.7 m *4*
99PD	0.0	(5/2)+	21.4 m *2*
100PD	0.0	0+	3.63 d *9*
101PD	0.0	5/2+	8.47 h *6*
102PD	0	0+	STABLE
103PD	0.0	5/2+	16.991 d *19*
104PD	0.0	0+	STABLE
105PD	0.0	5/2+	STABLE
106PD	0.0	0+	STABLE
107PD	0.0	5/2+	$6.5\times10^{+6}$ y *3*
107PD	214.6 *3*	11/2-	21.3 s *5*
108PD	0	0+	STABLE
108PD	1314.23 *6*	0+	> 25 ps
109PD	0	5/2+	13.59 h *12*
109PD	188.9903 *10*	11/2-	4.703 m *9*
110PD	0.0	0+	STABLE
111PD	0.0	5/2+	23.4 m *2*
111PD	172.18 *8*	11/2-	5.5 h *1*
112PD	0.0	0+	21.04 h *17*
113PD	0.0	(5/2+)	93 s *5*
114PD	0	0+	2.42 m *6*
115PD	0.0	(1/2)+	25 s *2*
115PD	89.21 *16*	(7/2-)	50 s *3*
116PD	0	0+	11.8 s *4*
117PD	0.0	(5/2+)	4.3 s *3*
118PD	0.0	0+	1.9 s *1*
124PD	62.2+X *17*		> 20 µs
95AG	0.0	(9/2+)	1.75 s *12*
96AG	0.0+X	(8)+	4.40 s *6*
96AG	0.0+Y	(2+)	6.9 s *6*
97AG	0.0	(9/2+)	25.5 s *3*
98AG	0.0	(6+)	47.5 s *3*
99AG	0.0	(9/2)+	124 s *3*
99AG	506.2 *4*	(1/2-)	10.5 s *5*
100AG	0.0	(5)+	2.01 m *10*
100AG	15.52 *16*	(2)+	2.24 m *15*
101AG	0.0	9/2+	11.1 m *3*
101AG	274.1 *3*	(1/2)-	3.10 s *10*
102AG	0	5(+)	12.9 m *3*
102AG	9.40 *7*	2+	7.7 m *5*
103AG	0.0	7/2+	65.7 m *7*
103AG	134.45 *4*	1/2-	5.7 s *3*
104AG	0.0	5+	69.2 m *10*
104AG	6.90 *22*	2+	33.5 m *20*

105AG	0.0	1/2-	41.29 d 7
105AG	25.468 *16*	7/2+	7.23 m *16*
106AG	0.0	1+	23.96 m *4*
106AG	89.66 *7*	6+	8.28 d *2*
107AG	0.0	1/2-	STABLE
107AG	93.125 *19*	7/2+	44.3 s *2*
108AG	0.0	1+	2.382 m *11*
108AG	109.466 *7*	6+	438 y *9*
109AG	0.0	1/2-	STABLE
109AG	88.0337 *10*	7/2+	39.79 s *21*
110AG	0.0	1+	24.56 s *11*
110AG	117.59 *5*	6+	249.83 d *4*
111AG	0.0	1/2-	7.45 d *1*
111AG	59.82 *4*	7/2+	64.8 s *8*
112AG	0.0	2(-)	3.130 h *8*
113AG	0	1/2-	5.37 h *5*
113AG	43.5 *1*	7/2+	68.7 s *16*
114AG	0.0	1+	4.6 s *1*
115AG	0.0	1/2-	20.0 m *5*
115AG	41.16 *10*	7/2+	18.0 s *7*
116AG	0.0	(0-)	230 s *5*
116AG	47.90 *10*	(3+)	20 s *1*
116AG	129.80 *22*	(6-)	9.3 s *3*
117AG	0.0	(1/2-)	72.8 s *+20-7*
117AG	28.6 *2*	(7/2+)	5.34 s *5*
118AG	0.0	1(-)	3.76 s *15*
118AG	127.63 *10*	4(+)	2.0 s *2*
119AG	0.0+X	(7/2+)	2.1 s *1*
119AG	0.0+Y	(1/2-)	6.0 s *5*
120AG	0.0	3(+)	1.23 s *4*
94CD	0	0+	> 760 ns
96CD	0	0+	1.03 s *+24-21*
97CD	0.0	(9/2+)	2.8 s *6*
98CD	0.0	0+	9.3 s *1*
99CD	0.0	(5/2+)	16 s *3*
100CD	0.0	0+	49.1 s *5*
100CD	1004.11 *10*	2+	> 1.0 ps
101CD	0.0	(5/2+)	1.36 m *5*
102CD	0.0	0+	5.5 m *5*
102CD	6746.16 *15*	(14-)	> 5.5 ps
102CD	7788.93 *18*	(16)	> 5.5 ps
102CD	8099.66 *13*	(17-)	> 1.25 ps
102CD	8942.69 *18*	(18-)	> 1.25 ps
103CD	0.0	(5/2)+	7.3 m *1*
104CD	0.0	0+	57.7 m *10*
105CD	0.0	5/2+	55.5 m *4*
106CD	0.0	0+	STABLE
107CD	0.0	5/2+	6.50 h *2*
108CD	0.0	0+	STABLE
109CD	0.0	5/2+	461.9 d *4*
110CD	0.0	0+	STABLE
111CD	0.0	1/2+	STABLE
111CD	396.214 *21*	11/2-	48.50 m *9*
111CD	736 *10*	3/2+,5/2+	> 1 ns
112CD	0.0	0+	STABLE
112CD	2300.68 *7*	0+	> 623 fs
112CD	2570.21 *6*	5-	> 693 fs
112CD	2571.47 *6*	6+	> 693 fs
112CD	2591.05 *5*	4-	> 693 fs
112CD	2665.64 *6*	5+	> 208 fs

112CD	2773.08 *8*	(0)+	> 693 fs
112CD	2791.79 *11*	(4)-	> 97 fs
112CD	2816.71 *7*	4+	> 416 fs
112CD	2834.27 *7*	0+	> 347 fs
112CD	2840.22 *11*	(4)+	> 485 fs
112CD	2882.82 *8*	0+	> 693 fs
112CD	2893.51 *6*	4+	> 416 fs
112CD	2924.83 *5*	4-	> 139 fs
112CD	3066.23 *10*	(2,3)-	> 207 fs
112CD	3068.62 *6*	4+	> 555 fs
112CD	3071.46 *8*	(4)+	> 249 fs
112CD	3189.82 *9*	4+,5,6+	> 354 fs
112CD	3205.74 *12*	2+,3,4	> 111 fs
112CD	3392.78 *12*	1,2+	> 693 fs
112CD	3393.39 *4*	0+:4+	> 970 fs
112CD	3402.93 *10*	1+,2+,3+	> 527 fs
112CD	3511.6 *3*	3-:7-	> 485 fs
112CD	3754.09 *11*	2+:6+	> 416 fs
113CD	0.0	1/2+	8.04×10^{15} y *5*
113CD	263.54 *3*	11/2-	14.1 y *5*
114CD	0	0+	STABLE
114CD	1864.262 *8*	3+	> 0.87 ps
114CD	1932.077 *8*	(4)+	> 0.31 ps
114CD	2152.266 *8*	3+,4+	> 0.35 ps
114CD	2204.561 *8*	3+	> 0.55 ps
114CD	2298.93 *2*	5-	> 1.04 ps
114CD	2437.64 *8*	0+	> 0.90 ps
114CD	2460.757 *12*	4-	> 0.68 ps
114CD	2525.420 *10*	2+	> 0.35 ps
114CD	2874.26 *6*	2,4	> 0.62 ps
114CD	2935.76 *6*	2+	> 0.35 ps
115CD	0.0	1/2+	53.46 h *5*
115CD	181.0 *5*	(11/2)-	44.56 d *24*
116CD	0.0	0+	$3.3\times10^{+19}$ y *4*
117CD	0.0	1/2+	2.49 h *4*
117CD	136.4 *2*	(11/2)-	3.36 h *5*
118CD	0.0	0+	50.3 m *2*
119CD	0.0	1/2+	2.69 m *2*
119CD	146.54 *11*	(11/2-)	2.20 m *2*
120CD	0.0	0+	50.80 s *21*
121CD	0.0	(3/2+)	13.5 s *3*
121CD	214.86 *15*	(11/2-)	8.3 s *8*
122CD	0.0	0+	5.24 s *3*
123CD	0.0	3/2(+)	2.10 s *3*
123CD	144 *4*	11/2(-)	1.80 s *3*
124CD	0.0	0+	1.25 s *2*
99IN	0		3.1 s *2*
100IN	0.0	(6+)	5.65 s *6*
101IN	0.0	(9/2+)	15.1 s *3*
102IN	0.0	(6+)	23.3 s *1*
103IN	0.0	(9/2)+	65 s 7
103IN	631.7 *1*	(1/2-)	34 s *2*
104IN	0	(6+)	1.80 m *3*
104IN	93.48 *10*	(3+)	15.7 s *5*
105IN	0.0	9/2+	5.07 m 7
105IN	674.09 *25*	(1/2-)	48 s *6*
106IN	0.0	7+	6.2 m *1*
106IN	28.6 *3*	(2)+	5.2 m *1*
107IN	0.0	9/2+	32.4 m *3*
107IN	678.5 *3*	1/2-	50.4 s *6*

108IN	0.0	7+	58.0 m *12*
108IN	29.75 *5*	2+	39.6 m *7*
109IN	0	9/2+	4.159 h *10*
109IN	649.79 *10*	1/2-	1.34 m *6*
109IN	3285.8 *3*	19/2-	> 1.0 ps
110IN	0.0	7+	4.92 h *8*
110IN	62.08 *4*	2+	69.1 m *5*
110IN	334.09 *5*	2+	≥ 4.9 ps
110IN	342.55 *5*	1+	≥ 4.9 ps
110IN	799.851 *16*	7-	≥ 2.0 ps
110IN	808.072 *21*	8-	≥ 2.4 ps
110IN	1006.06 *3*	(5,6)	≥ 1.7 ps
110IN	1017.93 *4*	9-	≥ 1.2 ps
110IN	1204.87 *5*	4-,5-,6-	≥ 1.1 ps
110IN	1482.35 *6*		≥ 1.8 ps
111IN	0.0	9/2+	2.8047 d *4*
111IN	536.99 *7*	1/2-	7.7 m *2*
111IN	2767.78 *25*	5/2+	> 1.4 ps
111IN	3024.53 *14*	23/2-	> 1.4 ps
112IN	0.0	1+	14.88 m *15*
112IN	156.592 *25*	4+	20.67 m *8*
113IN	0.0	9/2+	STABLE
113IN	391.699 *3*	1/2-	99.476 m *23*
114IN	0.0	1+	71.9 s *1*
114IN	190.2682 *8*	5+	49.51 d *1*
115IN	0.0	9/2+	$4.41\times10^{+14}$ y *25*
115IN	336.244 *17*	1/2-	4.486 h *4*
116IN	0.0	1+	14.10 s *3*
116IN	127.267 *6*	5+	54.29 m *17*
116IN	289.660 *6*	8-	2.18 s *4*
117IN	0.0	9/2+	43.2 m *3*
117IN	315.303 *11*	1/2-	116.2 m *3*
118IN	0.0	1+	5.0 s *5*
118IN	≈60	5+	4.45 m *5*
118IN	≈200	8-	8.5 s *3*
119IN	0	9/2+	2.4 m *1*
119IN	311.37 *3*	1/2-	18.0 m *3*
120IN	0.0	1+	3.08 s *8*
120IN	0.0+X	(8-)	47.3 s *5*
120IN	70 *60*	(5)+	46.2 s *8*
121IN	0.0	9/2+	23.1 s *6*
121IN	313.68 *7*	1/2-	3.88 m *10*
122IN	0.0	1+	1.5 s *3*
122IN	40 *60*	5+	10.3 s *6*
122IN	2.9E+2 *14*	(8-)	10.8 s *4*
123IN	0.0	9/2+	6.15 s *27*
123IN	327.21 *4*	1/2-	47.4 s *8*
123IN	2078.1+X	(21/2-)	≥ 100 µs
124IN	0.0	(1)+	3.12 s *9*
124IN	<50	(8-)	3.7 s *2*
125IN	0.0	9/2+	2.36 s *4*
125IN	360.12 *9*	1/2(-)	12.2 s *2*
126IN	0.0	3(+)	1.53 s *1*
126IN	90 *7*	(8-)	1.64 s *5*
127IN	0.0	(9/2+)	1.09 s *1*
127IN	408.9 *3*	(1/2-)	3.67 s *4*
127IN	1863 *58*	(21/2-)	1.04 s *10*
129IN	459 *5*	(1/2-)	1.23 s *3*
99SN	0		> 760 ns
100SN	0	0+	1.18 s *8*

101SN	0.0	(5/2+)	1.7 s *3*
102SN	0.0	0+	3.8 s *2*
103SN	0.0	(5/2+)	7.0 s *2*
104SN	0.0	0+	20.8 s *5*
105SN	0	(5/2+)	32.7 s *5*
106SN	0.0	0+	115 s *5*
107SN	0.0	(5/2+)	2.90 m *5*
108SN	0.0	0+	10.30 m *8*
109SN	0	5/2+	18.1 m *2*
110SN	0.0	0+	4.154 h *4*
111SN	0.0	7/2+	35.3 m *6*
111SN	2257.4 *3*	(17/2)+	≥ 4 ns
112SN	0.0	0+	STABLE
112SN	2190.81 *6*	0+	≥ 2.7 ps
112SN	2476.16 *11*	2+	> 2.4 ps
112SN	2617.62 *18*	0+	> 0.4 ps
112SN	2756.02 *9*	3+	> 0.8 ps
112SN	2765.2 *3*	0+:4+	> 1.0 ps
112SN	2913.07 *21*	4+	> 0.6 ps
112SN	2917.39 *10*	2+,3,4+	> 1.1 ps
112SN	2926.82 *18*	6+	> 0.22 ps
112SN	2945.70 *13*	4+	> 1.1 ps
112SN	2986.4 *3*	0+	> 1.7 ps
112SN	3078.53 *13*	(2,3)+	> 1.2 ps
112SN	3133.42 *11*	5-	> 1.0 ps
112SN	3248.69 *10*	2+	> 1.1 ps
112SN	3338.3 *3*	2+	> 0.3 ps
112SN	3353.1 *4*	2+	> 1.4 ps
112SN	3417.41 *11*	4+	> 0.4 ps
112SN	3456.31 *20*	2+,3+	> 0.7 ps
112SN	3471.7 *3*	4+	> 0.23 ps
112SN	3524.54 *18*	2+	> 0.12 ps
112SN	3557.29 *12*		> 0.3 ps
113SN	0.0	1/2+	115.09 d *3*
113SN	77.389 *19*	7/2+	21.4 m *4*
113SN	498.07 *5*	3/2+	> 0.35 ps
113SN	2200.7 *3*	5/2+	> 0.24 ps
113SN	3223.2 *5*	(19/2)-	> 1.4 ps
113SN	4475.1 *6*	(27/2+)	> 1.1 ps
114SN	0	0+	STABLE
114SN	2156.28 *3*	0+	> 7.6 ps
114SN	2815.146 *22*	5-	> 1.4 ps
114SN	3244.39 *7*	6-	> 1.4 ps
115SN	0.0	1/2+	STABLE
115SN	2592.35 *19*	(15/2-)	> 2.4 ps
115SN	2938.24 *17*	(17/2-)	> 1.7 ps
115SN	3203.81 *12*	17/2-	> 1.0 ps
115SN	4060.18 *13*	(23/2-)	> 1.0 ps
116SN	0	0+	STABLE
117SN	0.0	1/2+	STABLE
117SN	314.58 *4*	11/2-	14.00 d *5*
118SN	0.0	0+	STABLE
118SN	2328.02 *3*	2+	> 0.2 ps
118SN	2488.871 *19*	4+	> 0.55 ps
118SN	2677.35 *3*	2+	> 0.28 ps
119SN	0	1/2+	STABLE
119SN	89.531 *13*	11/2-	293.1 d *7*
120SN	0.0	0+	STABLE
120SN	2159.931 *25*	0+	> 4 ps
120SN	2587.25 *15*	0+	> 0.34 ps

120SN	2643.353 *20*	4+	> 1.0 ps
121SN	0.0	3/2+	27.03 h *4*
121SN	6.31 *6*	11/2-	43.9 y *5*
122SN	0.0	0+	STABLE
122SN	2087.71 *5*	0+	> 0.277 ps
122SN	2675.57 *6*	0+	> 0.2 ps
123SN	0.0	11/2-	129.2 d *5*
123SN	24.6 *4*	3/2+	40.06 m *2*
124SN	0.0	0+	STABLE
124SN	2192.17 *3*	0+	> 0.55 ps
124SN	2688.50 *5*	0+	> 0.28 ps
124SN	2819.3 *5*	(6+)	> 0.4 ps
124SN	2836.58 *4*	3+	> 0.28 ps
124SN	2958.11 *6*	4+	> 0.9 ps
124SN	2988.03 *3*	3-	> 0.55 ps
124SN	3267.13 *9*	1,2,3	> 0.14 ps
125SN	0.0	11/2-	9.64 d *3*
125SN	27.50 *14*	3/2+	9.52 m *5*
126SN	0.0	0+	$2.18\times10^{+5}$ y *10*
127SN	0.0	11/2-	2.10 h *4*
127SN	5.07 *6*	3/2+	4.13 m *3*
128SN	0.0	0+	59.07 m *14*
128SN	2091.50 *11*	(7-)	6.5 s *5*
129SN	0.0	3/2+	2.23 m *4*
129SN	35.15 *5*	11/2-	6.9 m *1*
130SN	0.0	0+	3.72 m *7*
130SN	1946.88 *10*	(7-)	1.7 m *1*
131SN	0.0	(3/2+)	56.0 s *5*
131SN	0.0+X	(11/2-)	58.4 s *5*
132SN	0.0	0+	39.7 s *8*
133SN	0.0	7/2-	1.46 s *3*
134SN	0.0	0+	1.050 s *11*
105SB	0	(5/2+)	1.22 s *11*
107SB	0.0	(5/2+)	4.0 s *2*
108SB	0.0	(4+)	7.4 s *3*
109SB	0	(5/2+)	17.2 s *5*
110SB	0.0	(3+)	23.6 s *3*
111SB	0.0	(5/2+)	75 s *1*
112SB	0.0	(3+)	53.5 s *6*
113SB	0.0	5/2+	6.67 m *7*
114SB	0.0	3+	3.49 m *3*
115SB	0.0	5/2+	32.1 m *3*
115SB	2638.42 *9*	15/2-	> 2.1 ps
116SB	0.0	3+	15.8 m *8*
116SB	383 *40*	8-	60.3 m *6*
117SB	0.0	5/2+	2.80 h *1*
117SB	1159.99 *8*	9/2+	> 2 ps
117SB	1310.62 *14*	9/2+	> 50 fs
117SB	1471.7 *8*	7/2	≥ 367 fs
117SB	1536.53 *16*	(9/2+)	≥ 243 fs
117SB	1623.9 *12*	3/2	≥ 132 fs
117SB	2323.05 *13*	15/2-	> 2 ps
117SB	2778.65 *25*	17/2+	> 1.4 ps
117SB	3214.13 *15*	19/2-	> 1.4 ps
118SB	0.0	1+	3.6 m *1*
118SB	250 *6*	8-	5.00 h *2*
119SB	0	5/2+	38.19 h *22*
119SB	699.88 *5*	3/2+,5/2+	> 300 fs
119SB	1048.42 *5*	7/2+	> 300 fs
119SB	1327.25 *11*	(1/2-)	> 76 fs

119SB	1487.61 *6*	(3/2+)	> 215 fs
119SB	1646.5 *10*	1/2+	> 450 fs
119SB	1848.2 *10*		> 130 fs
120SB	0.0	1+	15.89 m *4*
120SB	0.0+X	8-	5.76 d *2*
121SB	0.0	5/2+	STABLE
121SB	1035.429 *14*	9/2+	> 0.3×10^{-3} ps
122SB	0.0	2-	2.7238 d *2*
122SB	163.5591 *17*	(8)-	4.191 m *3*
123SB	0.0	7/2+	STABLE
124SB	0.0	3-	60.20 d *3*
124SB	10.8627 *8*	5+	93 s *5*
124SB	36.8440 *14*	(8)-	20.2 m *2*
125SB	0.0	7/2+	2.75856 y *25*
126SB	0.0	(8-)	12.35 d *6*
126SB	17.7 *3*	(5+)	19.15 m *9*
126SB	40.4 *3*	(3-)	≈ 11 s
127SB	0.0	7/2+	3.85 d *5*
128SB	0.0	8-	9.05 h *4*
128SB	0.0+X	5+	10.41 m *18*
129SB	0.0	7/2+	4.366 h *26*
129SB	1851.31 *6*	(19/2-)	17.7 m *1*
130SB	0.0	(8-)	39.5 m *8*
130SB	4.8 *2*	(4,5)+	6.3 m *2*
131SB	0.0	(7/2+)	23.03 m *4*
132SB	0.0	(4)+	2.79 m 7
132SB	0+X	(8-)	4.10 m *5*
133SB	0.0	(7/2+)	2.34 m *5*
134SB	279 *1*	(7-)	10.07 s *5*
135SB	0.0	(7/2+)	1.679 s *15*
108TE	0.0	0+	2.1 s *1*
109TE	0.0	(5/2+)	4.4 s *2*
110TE	0.0	0+	18.6 s *8*
111TE	0.0	(5/2)+	19.3 s *4*
112TE	0.0	0+	2.0 m *2*
113TE	0	(7/2+)	1.7 m *2*
114TE	0.0	0+	15.2 m 7
115TE	0.0	7/2+	5.8 m *2*
115TE	<20	(1/2)+	6.7 m *4*
116TE	0.0	0+	2.49 h *4*
117TE	0	1/2+	62 m *2*
118TE	0.0	0+	6.00 d *2*
119TE	0.0	1/2+	16.05 h *5*
119TE	260.96 *5*	11/2-	4.70 d *4*
120TE	0.0	0+	STABLE
121TE	0.0	1/2+	19.17 d *4*
121TE	293.974 *22*	11/2-	164.2 d *8*
122TE	0.0	0+	STABLE
122TE	1357.401 *24*	0+	> 1.39 ps
122TE	1747.04 *3*	0+	> 1.32 ps
122TE	1940.44 *9*	0+	> 1.39 ps
122TE	2535.72 *7*	3,4,5	> 0.47 ps
122TE	2538.84 *5*		> 0.76 ps
123TE	0.0	1/2+	> $9.2\times10^{+16}$ y
123TE	247.45 *4*	11/2-	119.2 d *3*
124TE	0.0	0+	STABLE
125TE	0.0	1/2+	STABLE
125TE	144.775 *8*	11/2-	57.40 d *15*
126TE	0.0	0+	STABLE
126TE	2218.085 *19*	5-	> 1.4 ps

126TE	3096.79 *20*		> 0.52 ps
127TE	0.0	3/2+	9.35 h 7
127TE	88.23 *7*	11/2-	106.1 d *7*
128TE	0.0	0+	$7.7\times10^{+24}$ y *4*
128TE	2308.30 *4*	0+	> 1.7 ps
129TE	0.0	3/2+	69.6 m *3*
129TE	105.51 *3*	11/2-	33.6 d *1*
130TE	0.0	0+	$> 0.79\times10^{+21}$ y
131TE	0.0	3/2+	25.0 m *1*
131TE	182.258 *18*	11/2-	33.25 h *25*
132TE	0.0	0+	3.204 d *13*
133TE	0.0	(3/2+)	12.5 m *3*
133TE	334.26 *4*	(11/2-)	55.4 m *4*
134TE	0.0	0+	41.8 m *8*
135TE	0.0	(7/2-)	19.0 s *2*
136TE	0.0	0+	17.63 s *9*
137TE	0.0	(7/2-)	2.49 s *5*
138TE	0.0	0+	1.4 s *4*
139TE	0.0	(7/2-)	1.6 s *3*
143TE	0		> 408 ns
111I	0.0	(5/2+)	2.5 s *2*
112I	0.0	(1+)	3.34 s *8*
112I	X		> 25 ps
113I	0.0	5/2+	6.6 s *2*
114I	0.0	1+	2.1 s *2*
114I	265.9	(7)	6.2 s *5*
115I	0.0	(5/2+)	1.3 m *2*
116I	0.0	1+	2.91 s *15*
117I	0.0	(5/2)+	2.22 m *4*
118I	0.0	2-	13.7 m *5*
118I	104.0+X *20*	(7-)	8.5 m *5*
119I	0.0	5/2+	19.1 m *4*
120I	0.0	2-	81.6 m *2*
120I	3.2E+2 *15*	(7-)	53 m *4*
121I	0.0	5/2+	2.12 h *1*
122I	0.0	1+	3.63 m *6*
123I	0.0	5/2+	13.2230 h *19*
124I	0.0	2-	4.1760 d *3*
125I	0.0	5/2+	59.407 d *10*
126I	0.0	2-	12.93 d *5*
127I	0.0	5/2+	STABLE
128I	0.0	1+	24.99 m *2*
129I	0.0	7/2+	$1.57\times10^{+7}$ y *4*
130I	0.0	5+	12.36 h *1*
130I	39.9525 *13*	2+	8.84 m *6*
131I	0.0	7/2+	8.0252 d *6*
132I	0.0	4+	2.295 h *13*
132I	120 *20*	(8-)	1.387 h *15*
133I	0.0	7/2+	20.83 h *8*
133I	1634.148 *10*	(19/2-)	9 s *2*
134I	0.0	(4)+	52.5 m *2*
134I	316.49 *22*	(8)-	3.52 m *4*
135I	0.0	7/2+	6.58 h *3*
136I	0	(1-)	83.4 s *4*
136I	201 *26*	(6-)	46.6 s *11*
137I	0.0	(7/2+)	24.5 s *2*
138I	0.0	(1-)	6.26 s *3*
139I	0.0	(7/2+)	2.280 s *11*
144I	X		≥ 300 ns
145I	0		> 407 ns

112XE	0.0	0+	2.7 s *8*
113XE	0.0	(5/2+)	2.74 s *8*
114XE	0	0+	10.0 s *4*
115XE	0.0	(5/2+)	18 s *4*
116XE	0.0	0+	59 s *2*
117XE	0.0	5/2(+)	61 s *2*
118XE	0.0	0+	3.8 m *9*
119XE	0.0	(5/2+)	5.8 m *3*
120XE	0.0	0+	40 m *1*
121XE	0.0	5/2(+)	40.1 m *20*
122XE	0.0	0+	20.1 h *1*
123XE	0.0	1/2(+)	2.050 h *14*
124XE	0.0	0+	≥ $1.6\times10^{+14}$ y
125XE	0.0	1/2(+)	16.9 h *2*
125XE	252.61 *14*	9/2(-)	57 s *1*
126XE	0.0	0+	STABLE
127XE	0.0	1/2+	36.346 d *3*
127XE	297.10 *8*	9/2-	69.2 s *9*
128XE	0.0	0+	STABLE
129XE	0.0	1/2+	STABLE
129XE	236.14 *3*	11/2-	8.88 d *2*
130XE	0.0	0+	STABLE
131XE	0.0	3/2+	STABLE
131XE	163.930 *8*	11/2-	11.84 d *4*
132XE	0.0	0+	STABLE
133XE	0.0	3/2+	5.2475 d *5*
133XE	233.221 *15*	11/2-	2.198 d *13*
134XE	0.0	0+	> $5.8\times10^{+22}$ y
135XE	0.0	3/2+	9.14 h *2*
135XE	526.551 *13*	11/2-	15.29 m *5*
136XE	0.0	0+	2.165×10^{21} y *61*
137XE	0.0	7/2-	3.818 m *13*
138XE	0.0	0+	14.14 m *7*
139XE	0.0	3/2-	39.68 s *14*
140XE	0.0	0+	13.60 s *10*
141XE	0.0	5/2(-)	1.73 s *1*
142XE	0.0	0+	1.23 s *2*
144XE	0.0	0+	1.15 s *20*
148XE	0	0+	> 0.4 µs
115CS	0.0		1.4 s *8*
116CS	100 *Syst.*	4+,5,6	3.85 s *13*
117CS	0	(9/2+)	8.4 s *6*
117CS	0+Z	(3/2+)	6.5 s *4*
118CS	0.0	2(-)	14 s *2*
118CS	0.0+X	(7-)	17 s *3*
119CS	0.0	9/2+	43.0 s *2*
119CS	0.0+X	3/2(+)	30.4 s *1*
120CS	0.0	2(+)	61.3 s *11*
120CS	0.0+X	(7-)	57 s *6*
121CS	0.0	3/2(+)	155 s *4*
121CS	68.5 *3*	9/2(+)	122 s *3*
122CS	0.0	1+	21.18 s *19*
122CS	45.87 *12*	(3)+	> 1 µs
122CS	140 *30*	8(-)	3.70 m *11*
123CS	0.0	1/2(+)	5.86 m *10*
123CS	156.27 *5*	11/2(-)	1.7 s *2*
124CS	0.0	1+	30.9 s *4*
124CS	462.63 *14*	(7)+	6.3 s *2*
125CS	0.0	1/2(+)	46.7 m *1*
126CS	0.0	1+	1.643 m *17*

126CS	272.44 *25*	(4)-	≥ 1 µs
127CS	0.0	1/2+	6.25 h *10*
128CS	0.0	1+	3.640 m *14*
129CS	0.0	1/2+	32.06 h *6*
130CS	0.0	1+	29.21 m *4*
130CS	163.25 *11*	5-	3.46 m *6*
131CS	0.0	5/2+	9.689 d *16*
132CS	0	2+	6.480 d *6*
133CS	0.0	7/2+	STABLE
134CS	0.0	4+	2.0652 y *4*
134CS	138.7441 *26*	8-	2.912 h *2*
135CS	0.0	7/2+	$2.3\times10^{+6}$ y *3*
135CS	1632.9	19/2-	53 m *2*
136CS	0.0	5+	13.01 d *5*
136CS	517.9 *1*	8-	17.5 s *2*
137CS	0.0	7/2+	30.08 y *9*
138CS	0.0	3-	32.5 m *2*
138CS	79.9 *3*	6-	2.91 m *10*
139CS	0.0	7/2+	9.27 m *5*
140CS	0.0	1-	63.7 s *3*
141CS	0.0	7/2+	24.84 s *16*
142CS	0.0	0-	1.684 s *14*
143CS	0	3/2+	1.791 s *7*
144CS	0.0	1(-)	0.994 s *6*
144CS	0+Y	(GE 4)	< 1 s
152CS	0		> 50 ms
116BA	0	0+	1.3 s *2*
117BA	0.0	(3/2)	1.75 s *7*
118BA	0	0+	5.5 s *2*
119BA	0.0	(5/2+)	5.4 s *3*
120BA	0.0	0+	24 s *2*
121BA	0.0	5/2(+)	29.7 s *15*
122BA	0.0	0+	1.95 m *15*
123BA	0.0	5/2(+)	2.4 m *4*
124BA	0.0	0+	11.0 m *5*
125BA	0.0	1/2(+)	3.3 m *3*
126BA	0.0	0+	100 m *2*
127BA	0.0	1/2+	12.7 m *4*
127BA	80.32 *11*	7/2-	1.93 s *7*
128BA	0.0	0+	2.43 d *5*
129BA	0.0	1/2+	2.23 h *11*
129BA	8.42 *6*	7/2+	2.135 h *10*
130BA	0.0	0+	STABLE
131BA	0.0	1/2+	11.50 d *6*
131BA	187.995 *9*	9/2-	14.6 m *2*
132BA	0.0	0+	> $3.0\times10^{+21}$ y
133BA	0.0	1/2+	10.551 y *11*
133BA	288.252 *9*	11/2-	38.93 h *10*
134BA	0.0	0+	STABLE
135BA	0.0	3/2+	STABLE
135BA	268.218 *20*	11/2-	28.7 h *2*
136BA	0.0	0+	STABLE
136BA	1578.969 *22*	0+	> 735 fs
136BA	2315.26 *7*	0+	> 0.85 ps
136BA	2587.08 *3*	(5)+	> 0.83 ps
137BA	0.0	3/2+	STABLE
137BA	661.659 *3*	11/2-	2.552 m *1*
138BA	0.0	0+	STABLE
138BA	2189.861 *22*	(1,2+)	≥ 0.8 ps
138BA	3504.28 *10*	2-	≥ 0.2 ps

138BA	3600.73 *10*	1	≥ 0.09 ps
139BA	0.0	7/2-	82.93 m *9*
140BA	0.0	0+	12.751 d *4*
141BA	0.0	3/2-	18.27 m *7*
142BA	0.0	0+	10.6 m *2*
143BA	0.0	5/2-	14.5 s *3*
144BA	0.0	0+	11.5 s *2*
145BA	0.0	5/2-	4.31 s *16*
146BA	0.0	0+	2.21 s *6*
120LA	0.0+X		2.8 s *2*
121LA	0.0		5.3 s *2*
122LA	0.0		8.6 s *5*
123LA	0.0		16.3 s *3*
124LA	0.0+V		21 s *4*
124LA	0.0+Y	(8-)	29.21 s *17*
125LA	0.0	(3/2+)	64.8 s *12*
126LA	0.0+V	(4,5)	54 s *2*
126LA	0.0+W	(0-,1,2-)	< 50 s
127LA	0.0	(11/2-)	5.1 m *1*
127LA	14.2 *4*	(3/2+)	3.7 m *4*
128LA	0.0	(5+)	5.18 m *14*
128LA	0.0+X	(1+,2-)	< 1.4 m
129LA	0.0	(3/2+)	11.6 m *2*
129LA	1558.03 *23*	(23/2-)	≥ 1.2 ps
130LA	0.0	3(+)	8.7 m *1*
131LA	0.0	3/2+	59 m *2*
132LA	0.0	2-	4.8 h *2*
132LA	188.20 *11*	6-	24.3 m *5*
133LA	0.0	5/2+	3.912 h *8*
134LA	0.0	1+	6.45 m *16*
135LA	0.0	5/2+	19.5 h *2*
136LA	0.0	1+	9.87 m *3*
137LA	0.0	7/2+	$6\times10^{+4}$ y *2*
138LA	0.0	5+	$1.03\times10^{+11}$ y *1*
139LA	0.0	7/2+	STABLE
140LA	0.0	3-	1.67858 d *21*
141LA	0.0	7/2(+)	3.92 h *3*
142LA	0.0	2-	91.1 m *5*
143LA	0.0	(7/2)+	14.2 m *1*
144LA	0.0	(3-)	40.8 s *4*
145LA	0.0	(5/2+)	24.8 s *20*
146LA	0.0	(2-)	6.1 s *3*
146LA	0.0+X	(6-)	9.8 s *4*
147LA	0.0	(5/2+)	4.06 s *4*
148LA	0.0	(2-)	1.26 s *8*
149LA	0.0	(3/2)	1.091 s *34*
121CE	0.0	(5/2)	1.1 s *1*
123CE	0.0	(5/2)	3.8 s *2*
124CE	0.0	0+	6 s *2*
125CE	0.0	(7/2-)	9.7 s *3*
126CE	0.0	0+	51.0 s *4*
127CE	0	(1/2+)	34 s *2*
127CE	7.3 *11*	(5/2+)	28.6 s *7*
127CE	36.8 *12*	(7/2-)	> 10 μs
128CE	0.0	0+	3.93 m *2*
129CE	0.0	(5/2+)	3.5 m *3*
130CE	0.0	0+	22.9 m *5*
131CE	0.0	7/2+	10.3 m *3*
131CE	63.09 *9*	(1/2+)	5.4 m *4*
131CE	1451.8 *4*	(19/2-)	> 2.8 ps

132CE	0.0	0+	3.51 h *11*
133CE	0.0	1/2+	97 m *4*
133CE	37.2 *7*	9/2-	5.1 h *3*
134CE	0.0	0+	3.16 d *4*
135CE	0.0	1/2(+)	17.7 h *3*
135CE	445.81 *21*	(11/2-)	20 s *1*
136CE	0.0	0+	STABLE
136CE	5642.6 *8*	16+	> 0.69 ps
136CE	5876.9 *9*	17+	> 0.69 ps
136CE	6170.2 *9*	(18+)	> 0.69 ps
137CE	0.0	3/2+	9.0 h *3*
137CE	254.29 *5*	11/2-	34.4 h *3*
138CE	0.0	0+	> $4.4\times10^{+16}$ y
139CE	0.0	3/2+	137.63 d *3*
139CE	754.24 *8*	11/2-	57.58 s *32*
139CE	2088.6 *3*	3/2+,5/2+	> 0.8 ps
140CE	0.0	0+	STABLE
140CE	3016.9 *5*	0+	≥ 0.14 ps
140CE	3408.02 *15*	(2+)	≥ 0.062 ps
140CE	3539.1 *3*	2+	≥ 0.21 ps
140CE	3646.7 *6*	(1,2+)	≥ 0.062 ps
140CE	3723.54 *17*	(2+)	≥ 0.097 ps
141CE	0.0	7/2-	32.504 d *13*
142CE	0.0	0+	> $5\times10^{+16}$ y
142CE	1652.91 *4*	3-	> 1.8 ps
142CE	2124.91 *8*	5-	> 0.41 ps
142CE	2374.96 *8*	+	> 0.69 ps
142CE	2576.23 *6*	3+	> 0.69 ps
142CE	2598.27 *10*	2+	> 1.66 ps
142CE	2734.77 *9*	(3,2)+	> 0.37 ps
142CE	2773.92 *9*	(3)+	> 0.69 ps
142CE	2859.75 *10*	4	> 0.69 ps
142CE	2868.97 *10*	(4)+	> 0.46 ps
142CE	2935.14 *21*	(2,3,4)	> 0.48 ps
142CE	3009.90 *20*		> 0.69 ps
142CE	3051.79 *15*	(3)+	> 0.69 ps
142CE	3109.79 *15*		> 0.69 ps
142CE	3125.71 *20*	(1,2,3)	> 0.65 ps
142CE	3155.36 *15*		> 0.69 ps
142CE	3180.37 *15*	1	> 0.69 ps
142CE	3218.21 *20*		> 0.69 ps
142CE	3300.74 *21*		> 0.69 ps
143CE	0.0	3/2-	33.039 h *6*
144CE	0.0	0+	284.91 d *5*
145CE	0.0	(5/2-)	3.01 m *6*
146CE	0.0	0+	13.49 m *16*
147CE	0.0	(5/2-)	56.4 s *10*
148CE	0.0	0+	56.8 s *3*
149CE	0.0	(3/2-)	5.12 s *25*
150CE	0.0	0+	4.0 s *6*
151CE	0.0	(5/2+)	1.76 s *6*
151CE	0+X		1.02 s *6*
152CE	0.0	0+	1.4 s *2*
124PR	0.0		1.2 s *2*
125PR	0.0		3.3 s *7*
126PR	0.0	GE 4	3.14 s *22*
127PR	0.0		4.2 s *3*
128PR	0.0	4,5,6	2.84 s *9*
129PR	0.0	(3/2+)	30 s *4*
130PR	0+X	(5+)	40.0 s *4*

131PR	0.0	(3/2+)	1.51 m *2*
131PR	152.4 *3*	(11/2-)	5.73 s *20*
132PR	0.0	(2)+	1.6 m *3*
133PR	0.0	(3/2+)	6.5 m *3*
133PR	192.12 *14*	(11/2-)	1.1 s *2*
134PR	0.0+X	2-	17 m *2*
134PR	0.0+Y	(6-)	≈ 11 m
135PR	0.0	3/2(+)	24 m *1*
136PR	0.0	2+	13.1 m *1*
137PR	0.0	5/2+	1.28 h *3*
138PR	0.0	1+	1.45 m *5*
138PR	364 *23*	7-	2.03 h *2*
139PR	0.0	5/2+	4.41 h *4*
140PR	0.0	1+	3.39 m *1*
141PR	0.0	5/2+	STABLE
141PR	1126.83 *10*	3/2+	> 188 fs
141PR	1657.07 *16*	1/2+	> 0.67 ps
141PR	1767.36 *13*	13/2+	> 0.37 ps
141PR	1986.08 *16*	(13/2+)	> 0.42 ps
141PR	2108.20 *23*	15/2(+)	> 28 fs
141PR	2126.10 *15*	(11/2+)	> 114 fs
141PR	2190.36 *20*	(1/2-)	> 215 fs
141PR	2267.20 *18*	(1/2+)	> 184 fs
141PR	2336.54 *21*	(15/2-)	> 28 fs
141PR	2454.20 *22*	(15/2+)	> 94 fs
141PR	2473.2 *3*	(1/2-,9/2-)	> 14 fs
141PR	2580.71 *16*	(11/2+)	> 13 fs
141PR	2659.6 *8*	(11/2+)	> 156 fs
141PR	2718.5 *4*	(9/2,11/2)	> 159 fs
141PR	2739.7 *4*	(1/2-,9/2-)	> 87 fs
141PR	2782.7 *3*	(13/2+)	> 51 fs
141PR	2810.70 *22*	(1/2+)	> 76 fs
141PR	2847.5 *3*	(9/2+)	> 97 fs
141PR	2881.6 *4*	(7/2+)	> 55 fs
141PR	2887.47 *25*	(7/2+,9/2,11/2+)	> 24 fs
142PR	0.0	2-	19.12 h *4*
142PR	3.694 *3*	5-	14.6 m *5*
143PR	0.0	7/2+	13.57 d *2*
144PR	0.0	0-	17.28 m *5*
144PR	59.03 *3*	3-	7.2 m *3*
145PR	0.0	7/2+	5.984 h *10*
146PR	0.0	(2-)	24.09 m *10*
147PR	0.0	(3/2+)	13.44 m *10*
148PR	0.0	1-	2.29 m *2*
148PR	76.80 *20*	4-	2.01 m *7*
149PR	0.0	(5/2+)	2.26 m *8*
150PR	0	(1-)	6.19 s *16*
151PR	0.0	(3/2-)	18.90 s *7*
151PR	35.10 *10*	(7/2+)	> 10 μs
152PR	0.0	(4+)	3.57 s *18*
153PR	0.0		4.29 s *11*
154PR	0	(3+)	2.3 s *1*
155PR	0.0		1.47 s *3*
127ND	≥0.0		1.8 s *4*
128ND	0	0+	5 s
129ND	0	(5/2+)	6.7 s *4*
129ND	0+X	(7/2-)	≈ 7 s
129ND	0+Z	(1/2+)	2.6 s *4*
130ND	0.0	0+	13 s *3*
131ND	0.0	(5/2+)	25.4 s *9*

132ND	0.0	0+	94 s *8*
133ND	0.0	(7/2+)	70 s *10*
133ND	127.97 *12*	(1/2+)	≈ 70 s
134ND	0.0	0+	8.5 m *15*
135ND	0.0	9/2(-)	12.4 m *6*
136ND	0.0	0+	50.65 m *33*
137ND	0.0	1/2+	38.5 m *15*
137ND	519.43 *20*	11/2-	1.60 s *15*
138ND	0.0	0+	5.04 h *9*
139ND	0.0	3/2+	29.7 m *5*
139ND	231.16 *5*	11/2-	5.50 h *20*
140ND	0.0	0+	3.37 d *2*
141ND	0.0	3/2+	2.49 h *3*
141ND	756.51 *5*	11/2-	62.0 s *8*
142ND	0.0	0+	STABLE
142ND	2585.550 *20*	1(+)	> 0.17 ps
143ND	0.0	7/2-	STABLE
144ND	0	0+	$2.29\times10^{+15}$ y *16*
144ND	2109.79 *3*	4+	> 0.2 ps
144ND	2218.31 *5*	6+	> 0.7 ps
144ND	2295.41 *3*	4+	> 0.27 ps
144ND	2420.21 *7*	5+	> 0.7 ps
144ND	2655.097 *24*	(3+)	> 0.7 ps
144ND	2692.97 *4*	2+	> 0.12 ps
144ND	2715.79 *7*	(5,6)	> 0.7 ps
144ND	2808.83 *9*	6+	> 44 fs
144ND	2834.58 *4*	(4+)	> 0.7 ps
144ND	2868.26 *5*	(3,2+)	> 0.14 ps
144ND	2887.98 *6*	(5,4)	> 0.7 ps
144ND	2901.34 *3*	2+	> 0.06 ps
144ND	2950.98 *6*	3(+)	> 58 fs
145ND	0.0	7/2-	STABLE
146ND	0.0	0+	STABLE
147ND	0.0	5/2-	11.03 d *3*
148ND	0.0	0+	STABLE
149ND	0.0	5/2-	1.726 h *5*
150ND	0	0+	0.91×10^{19} y *7*
151ND	0.0	3/2+	12.44 m *7*
152ND	0.0	0+	11.4 m *2*
153ND	0.0	(3/2)-	31.6 s *10*
154ND	0	0+	25.9 s *2*
154ND	1349	(5-)	> 1 μs
155ND	0.0	(3/2-)	8.9 s *2*
156ND	0	0+	5.26 s *20*
157ND	0.0	(5/2-)	1.15 s *3*
128PM	0.0	5,6,7	1.0 s *3*
129PM	0	(5/2-)	2.4 s *9*
130PM	0.0	(4,5,6)	2.6 s *2*
131PM	0.0	(11/2-)	6.3 s *8*
132PM	0.0	(3+)	6.2 s *6*
133PM	0.0	(3/2+)	13.5 s *21*
133PM	129.7 *7*	(11/2-)	< 8.8 s
134PM	0.0	(2+)	≈ 5 s
134PM	0.0+X	(5+)	22 s *1*
135PM	0+X	(3/2+,5/2+)	49 s *3*
135PM	68.7+Y *22*	(11/2-)	45 s *4*
136PM	X	(2)	300 s *50*
136PM	Y	(5-)	107 s *6*
137PM	0.0	11/2-	2.4 m *1*
138PM	0.0	(1+)	10 s *2*

138PM	X	(5-)	3.24 m *5*
139PM	0.0	(5/2)+	4.15 m *5*
140PM	0.0	1+	9.2 s *2*
140PM	0.0+X	8-	5.95 m *5*
141PM	0.0	5/2+	20.90 m *5*
141PM	2530.75 *17*		> 2 µs
141PM	2574.4 *4*		≥ 2 µs
142PM	0.0	1+	40.5 s *5*
143PM	0.0	5/2+	265 d *7*
144PM	0.0	5-	363 d *14*
145PM	0.0	5/2+	17.7 y *4*
146PM	0.0	3-	5.53 y *5*
147PM	0.0	7/2+	2.6234 y *4*
148PM	0.0	1-	5.368 d *7*
148PM	137.9 *3*	5-,6-	41.29 d *11*
149PM	0.0	7/2+	53.08 h *9*
150PM	0	(1-)	2.698 h *15*
151PM	0.0	5/2+	28.40 h *4*
152PM	0.0	1+	4.12 m *8*
152PM	1.5E+2 *9*	4-	7.52 m *8*
152PM	150+X	(8)	13.8 m *2*
153PM	0.0	5/2-	5.25 m *2*
154PM	0	(3,4)	2.68 m *7*
154PM	X	(0-,1-)	1.73 m *10*
155PM	0.0	5/2-	41.5 s *2*
156PM	0	4(+)	26.70 s *10*
156PM	150.3 *1*	1(+)	< 5 s
157PM	0.0	(5/2-)	10.56 s *12*
158PM	0.0		4.8 s *5*
158PM	121+X		> 16 µs
159PM	0.0	(5/2-)	1.634 s *42*
161PM	0.0	(5/2-)	1.05 s *15*
131SM	0.0		1.2 s *2*
132SM	0.0	0+	4.0 s *3*
133SM	0.0	(5/2+)	2.89 s *16*
133SM	0.0+Y	(1/2-)	3.5 s *4*
134SM	0.0	0+	9.5 s *8*
135SM	0.0	(3/2+,5/2+)	10.3 s *5*
136SM	0.0	0+	47 s *2*
137SM	0.0	(9/2-)	45 s *1*
138SM	0.0	0+	3.1 m *2*
139SM	0.0	1/2+	2.57 m *10*
139SM	457.38 *23*	11/2-	10.7 s *6*
139SM	5934.6 *15*	(39/2)	> 0.7 ps
140SM	0.0	0+	14.82 m *12*
141SM	0.0	1/2+	10.2 m *2*
141SM	175.9 *3*	11/2-	22.6 m *2*
142SM	0.0	0+	72.49 m *5*
143SM	0.0	3/2+	8.75 m *6*
143SM	753.99 *16*	11/2-	66 s *2*
144SM	0.0	0+	STABLE
144SM	2190.891 *25*	4+	> 0.14 ps
144SM	2477.651 *23*	0+	> 1.2 ps
144SM	2587.78 *3*	4+	> 0.12 ps
144SM	2707.04 *11*	(5+)	> 36 fs
144SM	2822.52 *4*	0+	> 0.76 ps
144SM	2825.71 *3*	(5-)	> 0.51 ps
144SM	3079.34 *15*	(5,6+,7)	> 7 ps
144SM	3124.07 *7*	7-	> 55 fs
144SM	3266.19 *8*	(4+,6)	> 15 fs

144SM	3308.27 *10*	(6+)	> 38 fs
144SM	3343.57 *5*	(3,4,5,6)	> 190 fs
145SM	0.0	7/2-	340 d *3*
146SM	0.0	0+	$6.8\times10^{+7}$ y 7
147SM	0.0	7/2-	1.073×10^{11} y *10*
148SM	0.0	0+	$7\times10^{+15}$ y *3*
149SM	0.0	7/2-	STABLE
150SM	0.0	0+	STABLE
151SM	0.0	5/2-	90 y *8*
152SM	0.0	0+	STABLE
152SM	1682.07 *12*	4-	> 596 fs
152SM	1754.98 *4*	0+	> 277 fs
153SM	0.0	3/2+	46.284 h *4*
154SM	0.0	0+	STABLE
154SM	1177.812 *21*	2+	> 2.4 ps
155SM	0.0	3/2-	22.18 m *6*
156SM	0	0+	9.4 h *2*
156SM	75.89 *5*	2+	> 2 ns
157SM	0.0	(3/2-)	8.03 m *7*
158SM	0.0	0+	5.30 m *3*
159SM	0.0	5/2-	11.37 s *15*
160SM	0.0	0+	9.6 s *3*
161SM	0		4.8 s *4*
162SM	0	0+	2.4 s *5*
163SM	0.0	(1/2-)	1.23 s *+51-47*
164SM	0.0	0+	1.43 s *24*
165SM	0		0.98 s *21*
166SM	0.0	0+	0.80 s *63*
135EU	0.0		1.5 s *2*
136EU	X	(7+)	3.3 s *3*
136EU	Y	(3+)	3.8 s *3*
137EU	0.0	(11/2-)	11 s *2*
138EU	0.0	(6-)	12.1 s *6*
139EU	0.0	(11/2)-	17.9 s *6*
140EU	0.0	1+	1.51 s *2*
141EU	0.0	5/2+	40.7 s 7
141EU	96.45 *7*	11/2-	2.7 s *3*
142EU	0.0	1+	2.34 s *12*
142EU	0.0+X	8-	1.223 m *8*
143EU	0.0	5/2+	2.59 m *2*
144EU	0.0	1+	10.2 s *1*
145EU	0.0	5/2+	5.93 d *4*
146EU	0.0	4-	4.61 d *3*
147EU	0.0	5/2+	24.1 d *6*
148EU	0.0	5-	54.5 d *5*
149EU	0.0	5/2+	93.1 d *4*
150EU	0.0	5-	36.9 y *9*
150EU	41.7 *10*	0-	12.8 h *1*
151EU	0.0	5/2+	$\geq 1.7\times10^{+18}$ y
152EU	0.0	3-	13.517 y *9*
152EU	45.5998 *4*	0-	9.3116 h *13*
152EU	147.86 *10*	8-	96 m *1*
153EU	0.0	5/2+	STABLE
154EU	0.0	3-	8.601 y *10*
154EU	145.3 *3*	8-	46.3 m *4*
155EU	0.0	5/2+	4.753 y *14*
156EU	0.0	0+	15.19 d *8*
157EU	0.0	5/2+	15.18 h *3*
158EU	0.0	(1-)	45.9 m *2*
159EU	0.0	5/2+	18.1 m *1*

160EU	0.0	(5-)	42.6 s *5*
160EU	93.0 *12*	(1-)	30.8 s *5*
161EU	0		26 s *3*
162EU	0		10.6 s *10*
163EU	0.0		7.7 s *4*
164EU	0	(3)	4.15 s *20*
165EU	0		2.24 s *14*
166EU	0		1.7 s *3*
135GD	0.0	(5/2+)	1.1 s *2*
136GD	0.0	0+	≥ 200 ns
137GD	0.0	(7/2)	2.2 s *2*
138GD	0	0+	4.7 s *9*
139GD	0.0	(9/2-)	5.8 s *9*
139GD	0+X		4.8 s *9*
140GD	0.0	0+	15.8 s *4*
141GD	0.0	1/2+	14 s *4*
141GD	377.76 *9*	11/2-	24.5 s *5*
142GD	0.0	0+	70.2 s *6*
142GD	6620.8 *6*	18-	> 1.0 ps
142GD	7071.3 *7*	19-	> 1.0 ps
142GD	7455.3 *8*	(20-)	> 1.4 ps
143GD	0.0	(1/2)+	39 s *2*
143GD	152.6	(11/2-)	110.0 s *14*
144GD	0.0	0+	4.47 m *6*
145GD	0.0	1/2+	23.0 m *4*
145GD	749.1 *2*	11/2-	85 s *3*
146GD	0.0	0+	48.27 d *9*
147GD	0.0	7/2-	38.06 h *12*
148GD	0.0	0+	71.1 y *12*
149GD	0.0	7/2-	9.28 d *10*
150GD	0.0	0+	$1.79\times10^{+6}$ y *8*
151GD	0.0	7/2-	123.9 d *10*
152GD	0.0	0+	1.08×10^{14} y *8*
153GD	0.0	3/2-	240.4 d *10*
154GD	0.0	0+	STABLE
155GD	0.0	3/2-	STABLE
156GD	0.0	0+	STABLE
156GD	1319.658 *2*	2-	> 3.9 ps
156GD	1468.506 *2*	4-	> 3.5 ps
157GD	0.0	3/2-	STABLE
158GD	0.0	0+	STABLE
158GD	1743.147 *14*	0+	> 0.75 ps
159GD	0.0	3/2-	18.479 h *4*
160GD	0.0	0+	STABLE
160GD	1057.426 *19*	3+	> 1525 fs
160GD	1376.73 *3*	2-	> 381 fs
160GD	1379.54 *4*	0+	> 936 fs
160GD	1436.27 *3*	2+	> 236 fs
160GD	1498.85 *5*	4-	> 277 fs
160GD	1558.35 *8*	0+	> 409 fs
160GD	1561.45 *5*	4+	> 222 fs
160GD	1586.56 *4*	2+	> 347 fs
160GD	1804.97 *6*	2+	> 208 fs
161GD	0	5/2-	3.66 m *5*
162GD	0	0+	8.4 m *2*
163GD	0.0	(5/2-,7/2+)	68 s *3*
164GD	0.0	0+	45 s *3*
165GD	0		11.3 s *13*
166GD	0.0	0+	4.8 s *10*
167GD	0	(5/2-)	4.26 s *+18-32*

168GD	0.0	0+	3.03 s *16*
138TB	X		≥ 200 ns
139TB	0.0		1.6 s *2*
140TB	0.0	(7+)	2.29 s *15*
141TB	0.0	(5/2-)	3.5 s *2*
143TB	0.0	(11/2-)	12 s *1*
143TB	0+X		< 21 s
144TB	0.0	1+	≈ 1 s
144TB	396.9 *5*	(6-)	4.25 s *15*
145TB	Y	(11/2-)	30.9 s *6*
146TB	0.0	1+	8 s *4*
146TB	0.0+X	5-	24.1 s *5*
147TB	0.0	(1/2+)	1.64 h *3*
147TB	50.6 *9*	(11/2-)	1.83 m *6*
148TB	0.0	2-	60 m *1*
148TB	90.1 *3*	(9)+	2.20 m *5*
149TB	0.0	1/2+	4.12 h *3*
149TB	35.75 *8*	11/2-	4.17 m *5*
150TB	0	(2)-	3.48 h *16*
150TB	461 *27*	9+	5.8 m *2*
151TB	0.0	1/2(+)	17.609 h *14*
151TB	99.53 *5*	(11/2-)	25 s *3*
152TB	0.0	2-	17.5 h *1*
152TB	501.74 *19*	8+	4.2 m *1*
153TB	0.0	5/2+	2.34 d *1*
154TB	0.0	0	21.5 h *4*
154TB	0+X	3-	9.4 h *4*
154TB	0+Y	7-	22.7 h *5*
155TB	0.0	3/2+	5.32 d *6*
156TB	0.0	3-	5.35 d *10*
156TB	49.630+X	(7-)	24.4 h *10*
156TB	88.4	(0+)	5.3 h *2*
157TB	0.0	3/2+	71 y *7*
158TB	0.0	3-	180 y *11*
158TB	110.3 *12*	0-	10.70 s *17*
159TB	0.0	3/2+	STABLE
160TB	0.0	3-	72.3 d *2*
161TB	0.0	3/2+	6.89 d *2*
162TB	0.0	1-	7.60 m *15*
163TB	0.0	3/2+	19.5 m *3*
164TB	0	(5+)	3.0 m *1*
165TB	0	(3/2+)	2.11 m *10*
166TB	0.0	(2-)	25.1 s *21*
167TB	0	(3/2+)	18.9 s *20*
168TB	0.0	(4-)	8.2 s *13*
169TB	0.0	(3/2+)	5.1 s *3*
170TB	0.0		0.96 s *8*
171TB	0.0		1.24 s *+9-10*
141DY	0.0	(9/2-)	0.9 s *2*
142DY	0.0	0+	2.3 s *3*
143DY	0	(1/2+)	5.6 s *10*
143DY	310.7 *6*	(11/2-)	3.0 s *3*
144DY	0.0	0+	9.1 s *4*
145DY	0.0	(1/2+)	6 s *2*
145DY	118.2 *2*	(11/2-)	14.1 s *7*
146DY	0.0	0+	33.2 s *7*
147DY	0.0	(1/2+)	67 s *7*
147DY	750.5 *4*	(11/2-)	55.2 s *5*
148DY	0.0	0+	3.3 m *2*
149DY	0.0	7/2-	4.2 m *2*

150DY	0	0+	7.17 m *5*
151DY	0.0	7/2(-)	17.9 m *3*
152DY	0.0	0+	2.38 h *2*
153DY	0.0	7/2(-)	6.4 h *1*
154DY	0.0	0+	$3.0\times10^{+6}$ y *15*
155DY	0.0	3/2-	9.9 h *2*
155DY	10520.6 *14*	71/2-	≥ 1.0 ps
155DY	11450.6 *18*	75/2-	≥ 1.0 ps
156DY	0	0+	STABLE
157DY	0.0	3/2-	8.14 h *4*
158DY	0.0	0+	STABLE
158DY	1607.99 *9*	(2)+	> 0.18 ps
159DY	0	3/2-	144.4 d *2*
160DY	0.0	0+	STABLE
161DY	0	5/2+	STABLE
162DY	0.0	0+	STABLE
163DY	0.0	5/2-	STABLE
164DY	0.0	0+	STABLE
165DY	0.0	7/2+	2.331 h *4*
165DY	108.1562 *13*	1/2-	1.257 m *6*
166DY	0	0+	81.6 h *1*
167DY	0.0	(1/2-)	6.20 m *8*
168DY	0.0	0+	8.7 m *3*
169DY	0.0	(5/2)-	39 s *8*
170DY	0.0	0+	55 s *8*
171DY	0.0		4.1 s *4*
172DY	0	0+	> 160 ns
173DY	0.0	(9/2+)	1.43 s *20*
174DY	0	0+	> 160 ns
145HO	0.0	(11/2-)	2.4 s *1*
146HO	0.0+X	(6-)	3.32 s *22*
147HO	0.0	(11/2-)	5.8 s *4*
148HO	0.0	(1+)	2.2 s *11*
148HO	0.0+X	(5)-	9.59 s *15*
149HO	0.0	(11/2-)	21.0 s *2*
149HO	48.8 *2*	(1/2+)	56 s *3*
149HO	7.20E3 *35*		≥ 100 ns
150HO	0.0	(2)-	72 s *4*
150HO	X	(9)+	23.5 s *3*
151HO	0.0	(11/2-)	35.2 s *1*
151HO	41.0 *2*	(1/2+)	47.2 s *13*
152HO	0.0	2-	161.8 s *3*
152HO	160 *1*	9+	49.8 s *2*
153HO	0.0	11/2-	2.01 m *3*
153HO	68.7 *3*	1/2+	9.3 m *5*
154HO	0.0	2-	11.76 m *19*
154HO	0+X *8*	8+	3.10 m *14*
155HO	0.0	5/2+	48 m *2*
156HO	0	4-	56 m *1*
156HO	52.37	1-	9.5 s *15*
156HO	52.37+X	9+	7.6 m *3*
157HO	0	7/2-	12.6 m *2*
158HO	0.0	5+	11.3 m *4*
158HO	67.20 *1*	2-	28 m *2*
158HO	180 *Calc.*	(9+)	21.3 m *23*
159HO	0	7/2-	33.05 m *11*
159HO	205.91 *5*	1/2+	8.30 s *8*
160HO	0.0	5+	25.6 m *3*
160HO	59.98 *3*	2-	5.02 h *5*
160HO	169.56+X	(9+)	3.2 s *2*

161HO	0.0	7/2-	2.48 h *5*
161HO	211.15 *3*	1/2+	6.76 s *7*
162HO	0	1+	15.0 m *10*
162HO	105.87 *6*	6-	67.0 m *7*
163HO	0.0	7/2-	4570 y *25*
163HO	297.88 *7*	1/2+	1.09 s *3*
163HO	1505.2	(17/2+)	≥ 15 ns
164HO	0.0	1+	28.8 m *5*
164HO	139.78 *7*	6-	36.6 m *3*
165HO	0.0	7/2-	STABLE
166HO	0.0	0-	26.824 h *12*
166HO	5.969 *12*	7-	1.20×10^{3} y *18*
167HO	0.0	7/2-	2.98 h *3*
168HO	0.0	3+	2.99 m *7*
168HO	≈59	(6+)	132 s *4*
168HO	143.43 *17*	(1)-	> 4 μs
169HO	0.0	7/2-	4.72 m *10*
170HO	0.0	(6+)	2.76 m *5*
170HO	120 *70*	(1+)	43 s *2*
171HO	0.0	(7/2-)	53 s *2*
172HO	0.0		25 s *3*
173HO	0.0	(7/2-)	6.9 s *5*
174HO	0.0	(8-)	3.2 s *11*
175HO	0.0	(7/2-)	1.9 s *6*
176HO	0		> 160 ns
144ER	0.0	0+	≥ 200 ns
145ER	253	(11/2-)	0.9 s *3*
146ER	0.0	0+	1.7 s *6*
147ER	0.0	(1/2+)	3.2 s *12*
147ER	0.0+X	(11/2-)	1.6 s *2*
148ER	0.0	0+	4.6 s *2*
149ER	0.0	(1/2+)	4 s *2*
149ER	741.69 *23*	(11/2-)	9.6 s *6*
150ER	0	0+	18.5 s *7*
151ER	0.0	(7/2-)	23.5 s *20*
152ER	0.0	0+	10.3 s *1*
153ER	0.0	(7/2-)	37.1 s *2*
154ER	0	0+	3.73 m *9*
155ER	0.0	7/2-	5.3 m *3*
156ER	0	0+	19.5 m *10*
157ER	0	3/2-	18.65 m *10*
158ER	0.0	0+	2.29 h *6*
159ER	0	3/2-	36 m *1*
160ER	0.0	0+	28.58 h *9*
161ER	0	3/2-	3.21 h *3*
162ER	0	0+	STABLE
162ER	1623.24 *10*	3-	> 0.31 ns
163ER	0.0	5/2-	75.0 m *4*
164ER	0.0	0+	STABLE
164ER	3263.09 *18*	16+	> 0.30 ps
165ER	0.0	5/2-	10.36 h *4*
166ER	0.0	0+	STABLE
166ER	1713.4 *7*	0+	> 0.97 ps
167ER	0.0	7/2+	STABLE
167ER	207.801 *5*	1/2-	2.269 s *6*
168ER	0.0	0+	STABLE
168ER	1411.0959 *18*	4+	> 0.83 ps
168ER	1616.8060 *19*	6+	> 1.7 ps
169ER	0.0	1/2-	9.392 d *18*
170ER	0.0	0+	STABLE

171ER	0.0	5/2-	7.516 h *2*
172ER	0.0	0+	49.3 h *5*
173ER	0.0	(7/2-)	1.4 m *1*
174ER	0.0	0+	3.2 m *2*
175ER	0.0	(9/2+)	1.2 m *3*
176ER	0	0+	> 160 ns
178ER	0	0+	> 160 ns
149TM	0.0	(11/2-)	0.9 s *2*
150TM	0.0	(6-)	2.20 s *6*
151TM	0.0	(11/2-)	4.17 s *11*
151TM	0.0+X	(1/2+)	6.6 s *20*
152TM	0.0	(2)-	8.0 s *10*
152TM	0.0+X	(9)+	5.2 s *6*
153TM	0.0	(11/2-)	1.48 s *1*
153TM	43.2 *2*	(1/2+)	2.5 s *2*
154TM	0	(2-)	8.1 s *3*
154TM	0+X	9+	3.30 s *7*
155TM	0.0	11/2-	21.6 s *2*
155TM	41 *6*	1/2+	45 s *4*
156TM	0	2-	83.8 s *18*
157TM	0	1/2+	3.63 m *9*
158TM	0.0	2-	3.98 m *6*
159TM	0	5/2+	9.13 m *16*
160TM	0.0	1-	9.4 m *3*
160TM	70 *20*	5	74.5 s *15*
161TM	0	7/2+	30.2 m *8*
162TM	0	1-	21.70 m *19*
162TM	X	5+	24.3 s *17*
163TM	0.0	1/2+	1.810 h *5*
164TM	0.0	1+	1.95 m *10*
164TM	0.0+X	6-	5.1 m *1*
165TM	0.0	1/2+	30.06 h *3*
166TM	0.0	2+	7.70 h *3*
167TM	0.0	1/2+	9.25 d *2*
168TM	0.0	3+	93.1 d *2*
169TM	0.0	1/2+	STABLE
170TM	0.0	1-	128.6 d *3*
171TM	0.0	1/2+	1.92 y *1*
172TM	0.0	2-	63.6 h *3*
173TM	0.0	(1/2+)	8.24 h *8*
174TM	0.0	(4)-	5.4 m *1*
175TM	0.0	(1/2+)	15.2 m *5*
176TM	0.0	(4+)	1.85 m *3*
177TM	0.0	(1/2+)	95 s *7*
177TM	0.0+X	(7/2-)	77 s *11*
178TM	0		> 300 ns
179TM	0		> 160 ns
180TM	0.0		> 300 ns
181TM	0		> 160 ns
150YB	0.0	0+	≥ 200 ns
151YB	0.0	(1/2+)	1.6 s *1*
151YB	0.0+X	(11/2-)	1.6 s *1*
152YB	0.0	0+	3.03 s *6*
153YB	0.0	(7/2-)	4.2 s *2*
155YB	0.0	(7/2-)	1.793 s *20*
156YB	0	0+	26.1 s *7*
157YB	0.0	7/2-	38.6 s *10*
158YB	0.0	0+	1.49 m *13*
159YB	0	5/2(-)	1.67 m *9*
160YB	0.0	0+	4.8 m *2*

161YB	0	3/2-	4.2 m *2*
162YB	0	0+	18.87 m *19*
163YB	0.0	3/2-	11.05 m *35*
163YB	58.1	(3/2-,5/2,7/2-)	> 10 ns
164YB	0.0	0+	75.8 m *17*
165YB	0.0	5/2-	9.8 m *5*
166YB	0.0	0+	56.7 h *1*
167YB	0.0	5/2-	17.5 m *2*
168YB	0.0	0+	STABLE
169YB	0.0	7/2+	32.018 d *5*
169YB	24.1999 *16*	1/2-	46 s *2*
170YB	0.0	0+	STABLE
171YB	0.0	1/2-	STABLE
172YB	0.0	0+	STABLE
173YB	0.0	5/2-	STABLE
174YB	0.0	0+	STABLE
175YB	0.0	(7/2-)	4.185 d *1*
176YB	0.0	0+	STABLE
176YB	1049.8 *6*	8-	11.4 s *3*
177YB	0.0	9/2+	1.911 h *3*
177YB	331.5 *3*	1/2-	6.41 s *2*
178YB	0.0	0+	74 m *3*
179YB	0.0	(1/2-)	8.0 m *4*
180YB	0.0	0+	2.4 m *5*
181YB	0		> 160 ns
182YB	0	0+	> 160 ns
183YB	0.0		≥ 222 ns
184YB	0	0+	> 160 ns
185YB	0		> 160 ns
153LU	0.0	11/2-	0.9 s *2*
153LU	2502.5 *4*	(23/2-)	> 0.1 μs
154LU	X	(9+)	1.12 s *8*
157LU	0.0	(1/2+,3/2+)	6.8 s *18*
157LU	20.9 *20*	(11/2-)	4.79 s *12*
158LU	0.0	(2)-	10.6 s *3*
159LU	0		12.1 s *10*
160LU	≥0.0		36.1 s *3*
160LU	0.0+X		40 s *1*
161LU	0	1/2+	77 s *2*
162LU	0	1-	1.37 m *2*
162LU	X	(4-)	1.5 m
162LU	Y		1.9 m
163LU	0.0	1/2(+)	3.97 m *13*
164LU	0.0	1(-)	3.14 m *3*
165LU	0.0	1/2+	10.74 m *10*
165LU	4996.50+X *28*	(47/2-)	> 0.19 ps
165LU	5740.6+X *4*	(51/2-)	> 0.13 ps
166LU	0.0	6-	2.65 m *10*
166LU	34.37 *22*	3(-)	1.41 m *10*
166LU	43.0 *4*	0-	2.12 m *10*
167LU	0.0	7/2+	51.46 m *15*
167LU	33.7 *4*	1/2+	≥ 1 m
168LU	0.0	6(-)	5.5 m *1*
168LU	202.81 *12*	3+	6.7 m *4*
169LU	0.0	7/2+	34.06 h *5*
169LU	29.0 *5*	1/2-	160 s *10*
170LU	0.0	0+	2.012 d *30*
171LU	0.0	7/2+	8.247 d *23*
171LU	71.13 *8*	1/2-	79 s *2*
172LU	0.0	4-	6.70 d *3*

172LU	41.86 *4*	1-	3.7 m *5*
173LU	0.0	7/2+	1.37 y *1*
174LU	0.0	(1)-	3.31 y *5*
174LU	170.83 *5*	(6)-	142 d *2*
175LU	0.0	7/2+	STABLE
176LU	0.0	7-	$3.76\times10^{+10}$ y 7
176LU	122.845 *4*	1-	3.664 h *19*
177LU	0.0	7/2+	6.6443 d *9*
177LU	970.1757 *24*	23/2-	160.4 d *3*
178LU	0	1(+)	28.4 m *2*
178LU	123.8 *26*	(9-)	23.1 m *3*
179LU	0.0	7/2+	4.59 h *6*
180LU	0.0	5+	5.7 m *1*
180LU	624.0 *5*	(9-)	≥ 1 ms
181LU	0.0	(7/2+)	3.5 m *3*
182LU	0		2.0 m *2*
183LU	0.0	(7/2+)	58 s *4*
184LU	0.0	(3+)	19 s *2*
185LU	0		> 160 ns
154HF	0	0+	2 s *1*
158HF	0	0+	2.85 s 7
159HF	0	7/2-	5.6 s *4*
160HF	0.0	0+	13.6 s *2*
161HF	0.0	(7/2-)	18.4 s *4*
162HF	0	0+	39.4 s *9*
163HF	0.0	(5/2-)	40.0 s *6*
164HF	0	0+	111 s *8*
165HF	0.0	(5/2-)	76 s *4*
166HF	0.0	0+	6.77 m *30*
167HF	0.0	(5/2-)	2.05 m *5*
168HF	0.0	0+	25.95 m *20*
169HF	0.0	5/2-	3.24 m *4*
170HF	0.0	0+	16.01 h *13*
171HF	0.0	7/2(+)	12.1 h *4*
171HF	21.93 *9*	1/2(-)	29.5 s *9*
172HF	0.0	0+	1.87 y *3*
173HF	0.0	1/2-	23.6 h *1*
174HF	0.0	0+	$2.0\times10^{+15}$ y *4*
175HF	0.0	5/2(-)	70 d *2*
175HF	7455.2 *17*	(57/2-)	> 7 ns
176HF	0.0	0+	STABLE
177HF	0.0	7/2-	STABLE
177HF	1315.4502 *8*	23/2+	1.09 s *5*
177HF	2740.02 *15*	37/2-	51.4 m *5*
178HF	0.0	0+	STABLE
178HF	1147.416 *6*	8-	4.0 s *2*
178HF	2446.09 *8*	16+	31 y *1*
179HF	0.0	9/2+	STABLE
179HF	375.0352 *25*	1/2-	18.67 s *4*
179HF	1105.74 *16*	25/2-	25.05 d *25*
180HF	0.0	0+	STABLE
180HF	1141.552 *15*	8-	5.53 h *2*
180HF	2537.4 *10*	(14+)	> 10 μs
181HF	0.0	1/2-	42.39 d *6*
182HF	0.0	0+	$8.90\times10^{+6}$ y *9*
182HF	1172.87 *18*	(8-)	61.5 m *15*
183HF	0.0	(3/2-)	1.018 h *2*
184HF	0.0	0+	4.12 h *5*
184HF	1272.2 *4*	(8-)	48 s *10*
185HF	0.0		3.5 m *6*

186HF	0.0	0+	2.6 m *12*
186HF	2968 *43*		> 20 s
159TA	0	1/2+	0.83 s *18*
160TA	0.0		1.55 s *4*
160TA	0.0+X		1.7 s *2*
161TA	X	(11/2-)	3.08 s *11*
162TA	0		3.57 s *12*
163TA	0.0		10.6 s *18*
164TA	0.0	(3+)	14.2 s *3*
165TA	0.0	(9/2-)	31.0 s *15*
166TA	0.0	(2)+	34.4 s *5*
167TA	0.0	(3/2+)	80 s *4*
168TA	0.0	(2-,3+)	2.0 m *1*
169TA	0.0	(5/2+)	4.9 m *4*
170TA	0.0	(3+)	6.76 m *6*
171TA	0.0	(5/2+)	23.3 m *3*
171TA	31.2	(5/2-)	23.3 m *3*
171TA	2571.0 *3*	(33/2-)	> 0.69 ps
172TA	0.0	(3+)	36.8 m *3*
173TA	0.0	5/2-	3.14 h *13*
174TA	0.0	3+	1.14 h *8*
175TA	0.0	7/2+	10.5 h *2*
176TA	0.0	(1)-	8.09 h *5*
177TA	0.0	7/2+	56.36 h *13*
178TA	0.0+X	7-	2.36 h *8*
178TA	0.0+Y	(1+)	9.31 m *3*
179TA	0.0	7/2+	1.82 y *3*
180TA	0.0	1+	8.154 h *6*
180TA	77.2 *12*	9-	> 7.1×10^{15} y
181TA	0.0	7/2+	STABLE
182TA	0.0	3-	114.74 d *12*
182TA	519.577 *16*	10-	15.84 m *10*
183TA	0.0	7/2+	5.1 d *1*
184TA	0.0	(5-)	8.7 h *1*
185TA	0.0	(7/2+)	49.4 m *15*
185TA	1258.5+X	(21/2)	> 1 ms
186TA	0.0	(3-)	10.39 m *3*
186TA	336 *20*		1.54 m *5*
186TA	347.9 *3*	(7+)	17 s *2*
187TA	0.0	(7/2+)	283 s *10*
187TA	1778.1 *10*	(25/2-)	7.3 s *9*
187TA	2933 *14*	(41/2+)	> 5 m
188TA	0	(1-)	19.6 s *20*
188TA	99 *33*	(7-)	19.6 s *20*
190TA	0	(3)	5.3 s *7*
191TA	0		> 300 ns
192TA	0.0	(1,2)	2.2 s *7*
162W	0	0+	1.19 s *12*
163W	0.0	7/2-	2.67 s *10*
164W	0.0	0+	6.3 s *2*
165W	0.0	(5/2-)	5.1 s *5*
166W	0.0	0+	19.2 s *6*
167W	0.0	(5/2-)	19.9 s *5*
168W	0.0	0+	50.9 s *19*
168W	1834.2 *4*	7(-)	> 3.1 ps
168W	2581.6 *9*	(10+)	> 104 ps
169W	0.0	(5/2-)	74 s *6*
170W	0.0	0+	2.42 m *4*
171W	0.0	(5/2-)	2.38 m *4*
172W	0.0	0+	6.6 m *9*

173W	0.0	5/2-	7.6 m *2*
174W	0.0	0+	33.2 m *21*
174W	1672.0 *5*		≥ 187 ns
175W	0.0	(1/2-)	35.2 m *6*
176W	0.0	0+	2.5 h *1*
177W	0.0	1/2-	132.4 m *20*
178W	0.0	0+	21.6 d *3*
179W	0.0	7/2-	37.05 m *16*
179W	221.91 *3*	1/2-	6.40 m *7*
180W	0.0	0+	1.8×10^{18} y *2*
181W	0.0	9/2+	121.2 d *2*
182W	0.0	0+	STABLE
183W	0.0	1/2-	≥ $6.7\times10^{+20}$ y
183W	309.492 *4*	11/2+	5.30 s *8*
184W	0.0	0+	STABLE
184W	1431.02 *5*	2+	> 5 ps
185W	0.0	3/2-	75.1 d *3*
185W	197.383 *23*	11/2+	1.67 m *3*
186W	0.0	0+	STABLE
186W	3542.8 *21*	(16+)	7.5 s *+48-35*
187W	0.0	3/2-	23.80 h *3*
188W	0	0+	69.78 d *12*
189W	0		11.6 m *2*
190W	0.0	0+	30.0 m *15*
195W	0		> 160 ns
196W	0	0+	> 160 ns
197W	0		> 160 ns
164RE	0+X		0.86 s *+15-11*
165RE	0.0	(1/2+)	1.6 s *6*
165RE	48 *26*	(11/2-)	1.74 s *6*
166RE	0		2.25 s *21*
167RE	0.0	(1/2+)	3.4 s *4*
167RE	0.0+X	(9/2-)	5.9 s *5*
168RE	0.0	(7+)	4.4 s *1*
169RE	0.0	(9/2-)	8.1 s *5*
169RE	0.0+X	(1/2+,3/2+)	15.1 s *15*
170RE	0.0	(5+)	9.2 s *2*
171RE	0.0	(9/2-)	15.2 s *4*
172RE	0+X	(5+)	15 s *3*
172RE	0+Y	(2)	55 s *5*
173RE	0.0	(5/2-)	1.98 m *26*
174RE	0.0		2.40 m *4*
175RE	0.0	(5/2-)	5.89 m *5*
176RE	0.0	(3+)	5.3 m *3*
177RE	0.0	5/2-	14 m *1*
177RE	0.0+X	9/2-	> 100 ns
178RE	0.0	(3+)	13.2 m *2*
179RE	0.0	5/2+	19.5 m *1*
180RE	0.0	(1)-	2.46 m *3*
181RE	0.0	5/2+	19.9 h *7*
182RE	0.0	7+	64.2 h *5*
182RE	0.0+X	2+	14.14 h *45*
183RE	0.0	5/2+	70.0 d *14*
184RE	0.0	3(-)	35.4 d *7*
184RE	188.0463 *17*	8(+)	169 d *8*
185RE	0.0	5/2+	STABLE
186RE	0.0	1-	3.7185 d *5*
186RE	148.2 *5*	(8+)	$2.0\times10^{+5}$ y
187RE	0.0	5/2+	$4.33\times10^{+10}$ y *7*
187RE	589.143 *16*	3/2+	> 1.4 ps

188RE	0.0	1-	17.005 h *3*
188RE	172.0848 *24*	6-	18.59 m *4*
189RE	0	5/2+	24.3 h *4*
190RE	0	(2)-	3.0 m *2*
190RE	204 *10*	(6-)	3.1 h *2*
191RE	0.0	(3/2+,1/2+)	9.8 m *5*
192RE	0.0		16 s *1*
192RE	267 *10*		61 s *+40-20*
194RE	0	(0+,1)	5 s *1*
194RE	285 *40*	(11-)	25 s *8*
194RE	833 *33*		100 s *10*
195RE	0	[3/2-]	6 s *1*
196RE	0		3 s *+1-2*
197RE	0		> 160 ns
198RE	0		> 160 ns
199RE	0		> 160 ns
168OS	0.0	0+	2.1 s *1*
169OS	0.0	(5/2-)	3.43 s *14*
170OS	0.0	0+	7.37 s *18*
171OS	0.0	(5/2-)	8.3 s *2*
172OS	0.0	0+	19.2 s *9*
173OS	0.0	5/2-	22.4 s *9*
173OS	141.2 *2*	(9/2+)	> 28 ns
174OS	0.0	0+	44 s *4*
175OS	0.0	(5/2-)	1.4 m *1*
176OS	0.0	0+	3.6 m *5*
177OS	0.0	1/2-	3.0 m *2*
178OS	0.0	0+	5.0 m *4*
179OS	0.0	1/2-	6.5 m *3*
180OS	0.0	0+	21.5 m *4*
181OS	0.0	1/2-	105 m *3*
181OS	49.20 *14*	7/2-	2.7 m *1*
182OS	0.0	0+	21.84 h *20*
183OS	0.0	9/2+	13.0 h *5*
183OS	170.73 *7*	1/2-	9.9 h *3*
184OS	0.0	0+	> 5.6×10^{13} y
185OS	0.0	1/2-	93.6 d *5*
186OS	0.0	0+	$2.0\times10^{+15}$ y *11*
186OS	3440.4 *6*	(14+)	≥ 0.92 ps
187OS	0.0	1/2-	STABLE
188OS	0.0	0+	STABLE
189OS	0.0	3/2-	STABLE
189OS	30.82 *2*	9/2-	5.81 h *10*
189OS	427.93 *4*	5/2-,7/2-	> 4.4 ps
189OS	531.55 *3*	5/2-	> 0.26 ps
189OS	550.04 *3*	3/2-	> 0.039 ps
190OS	0.0	0+	STABLE
190OS	1705.7 *1*	10-	9.86 m *3*
191OS	0.0	9/2-	15.4 d *1*
191OS	74.382 *3*	3/2-	13.10 h *5*
192OS	0.0	0+	STABLE
192OS	2015.40 *11*	(10-)	5.9 s *1*
192OS	3103.8 *15*	(12+)	≥ 2.1 ps
193OS	0.0	3/2-	29.830 h *18*
194OS	0.0	0+	6.0 y *2*
195OS	0.0	(3/2-)	6.5 m *11*
195OS	454 *10*		> 9 m
196OS	0.0	0+	34.9 m *2*
197OS	0		2.8 m *6*
199OS	0		5 s *+4-2*

200OS	0	0+	6 s *+4-3*
202OS	0	0+	> 160 ns
170IR	0.0	(3-)	0.87 s *+18-12*
171IR	0.0	(1/2+)	3.2 s *+13-7*
171IR	0.0+X	(11/2-)	1.2 s *1*
172IR	0+X	(3-,4-)	4.4 s *3*
172IR	0+Y	(7+)	2.19 s *7*
173IR	0.0	(3/2+,5/2+)	9.0 s *8*
173IR	226 *18*	11/2-	2.20 s *5*
174IR	0.0	(3+)	7.9 s *6*
174IR	193 *11*	(7+)	4.9 s *3*
175IR	0.0	(5/2-)	9 s *2*
176IR	0.0		8.7 s *5*
177IR	0.0	5/2-	29.8 s *17*
177IR	0.0+X	(9/2-)	> 100 ns
177IR	180.9 *4*	5/2+	> 100 ns
178IR	0.0		12 s *2*
178IR	140.50+Y *10*	(8-)	≥ 4 ns
179IR	0.0	(5/2)-	79 s *1*
180IR	0.0	(5+)	1.5 m *1*
181IR	0.0	5/2-	4.90 m *15*
182IR	0.0	3+	15.0 m *10*
183IR	0.0	5/2-	58 m *6*
184IR	0.0	5-	3.09 h *3*
184IR	432.49 *11*	(2)+	> 10 ns
185IR	0.0	5/2-	14.4 h *1*
186IR	0.0	5+	16.64 h *3*
186IR	X+0.0	2-	1.90 h *5*
187IR	0.0	3/2+	10.5 h *3*
188IR	0.0	1-	41.5 h *5*
189IR	0.0	3/2+	13.2 d *1*
190IR	0.0	4-	11.78 d *10*
190IR	26.1 *1*	(1)-	1.120 h *3*
190IR	36.154 *25*	4+	> 2 µs
190IR	376.4 *1*	11-	3.087 h *12*
191IR	0.0	3/2+	STABLE
191IR	171.29 *4*	11/2-	4.899 s *23*
191IR	624.07 *4*	(1/2+)	> 5 ps
191IR	2046.7+X		5.5 s *7*
192IR	0.0	4+	73.829 d *11*
192IR	56.720 *5*	1-	1.45 m *5*
192IR	118.7824 *18*	3-	> 15 ns
192IR	168.14 *12*	(11-)	241 y *9*
193IR	0.0	3/2+	STABLE
193IR	80.238 *6*	11/2-	10.53 d *4*
194IR	0.0	1-	19.18 h *3*
194IR	190.0+X	(10,11)	171 d *11*
195IR	0.0	3/2+	2.29 h *17*
195IR	100 *5*	11/2-	3.67 h *8*
196IR	0.0	(0-)	52 s *1*
196IR	4.1E+2 *11*	(10,11-)	1.40 h *2*
197IR	0.0	3/2+	5.8 m *5*
197IR	115 *5*	11/2-	8.9 m *3*
198IR	0.0		8 s *1*
199IR	0		6 s *+5-4*
200IR	0	(2-,3-)	43 s *6*
201IR	0	(3/2+)	21 s *5*
202IR	0	(1-,2-)	11 s *3*
204IR	0		> 160 ns
175PT	0.0	7/2-	2.53 s *6*

176PT	0.0	0+	6.33 s *15*
177PT	0.0	5/2-	10.0 s *4*
178PT	0.0	0+	20.7 s *7*
179PT	0.0	1/2-	21.2 s *4*
180PT	0.0	0+	56 s *3*
181PT	0.0	1/2-	52.0 s *22*
181PT	116.65 *8*	(7/2)-	> 300 ns
182PT	0.0	0+	2.67 m *12*
183PT	0.0	1/2-	6.5 m *10*
183PT	34.74 *7*	7/2-	43 s *5*
183PT	195.90 *10*	(9/2)+	> 150 ns
184PT	0.0	0+	17.3 m *2*
185PT	0.0	9/2+	70.9 m *24*
185PT	103.41 *5*	1/2-	33.0 m *8*
186PT	0.0	0+	2.10 h *5*
187PT	0.0	3/2-	2.35 h *3*
188PT	0.0	0+	10.16 d *18*
189PT	0.0	3/2-	10.87 h *12*
190PT	0.0	0+	4.97×10^{11} y *16*
191PT	0.0	3/2-	2.83 d *2*
191PT	100.663 *20*	(9/2)-	> 1 µs
192PT	0.0	0+	STABLE
193PT	0.0	1/2-	50 y *6*
193PT	149.78 *4*	13/2+	4.33 d *3*
194PT	0.0	0+	STABLE
195PT	0.0	1/2-	STABLE
195PT	259.077 *23*	13/2+	4.010 d *5*
195PT	455.272 *7*	5/2-	> 10.5 ps
195PT	544.1 *5*	(5/2-)	> 2.8 ps
195PT	678.3 *10*	5/2-,7/2-	> 72.8 ps
195PT	1189 *6*	5/2-,7/2-	≥ 2.4×10^{-6} eV
196PT	0.0	0+	STABLE
196PT	2429.7 *4*	3-	> 166 fs
196PT	2603.2 *2*	(1,2,3,4,5)	> 66 fs
196PT	2606.0 *1*	(2,3,4,5)	> 111 fs
196PT	2711.0 *1*	3-	> 55 fs
197PT	0.0	1/2-	19.8915 h *19*
197PT	399.59 *20*	13/2+	95.41 m *18*
198PT	0.0	0+	STABLE
199PT	0.0	5/2-	30.80 m *21*
199PT	424 *2*	(13/2)+	13.6 s *4*
200PT	0.0	0+	12.6 h *3*
201PT	0.0	(5/2-)	2.46 m *9*
202PT	0	0+	44 h *15*
203PT	0	(1/2-)	22 s *4*
203PT	1367 *3*	(13/2+)	12 s *5*
204PT	0.0	0+	10.3 s *14*
206PT	0	0+	> 160 ns
176AU	0.0+X	(3-)	1.05 s *1*
176AU	0.0+Y	(9+)	1.36 s *2*
177AU	0.0	1/2+	1.501 s *20*
177AU	182.7 *5*	(11/2-)	1.193 s *13*
178AU	0.0		2.6 s *5*
179AU	0.0	(1/2+,3/2+)	7.1 s *3*
179AU	86+X *13*		> 100 µs
180AU	0.0		8.4 s *6*
181AU	0.0	(3/2-)	13.7 s *14*
182AU	0.0	(2+)	15.5 s *4*
183AU	0.0	(5/2)-	42.8 s *10*
183AU	73.3 *4*	(1/2)+	> 1 µs

184AU	0.0	5+	20.6 s *9*
184AU	68.46 *4*	2+	47.6 s *14*
185AU	0.0	5/2-	4.25 m *6*
185AU	0.0+X		6.8 m *3*
186AU	0.0	3-	10.7 m *5*
187AU	0.0	1/2(+)	8.3 m *2*
187AU	120.33 *14*	9/2(-)	2.3 s *1*
188AU	0.0	1-	8.84 m *6*
188AU	0.0+X	(11-)	> 400 ns
189AU	0.0	1/2+	28.7 m *4*
189AU	247.25 *16*	11/2-	4.59 m *11*
190AU	0.0	1-	42.8 m *10*
191AU	0.0	3/2+	3.18 h *8*
191AU	266.2 *7*	(11/2-)	0.92 s *11*
192AU	0.0	1-	4.94 h *9*
193AU	0.0	3/2+	17.65 h *15*
193AU	290.20 *4*	11/2-	3.9 s *3*
194AU	0.0	1-	38.02 h *10*
195AU	0.0	3/2+	186.01 d *6*
195AU	318.58 *4*	11/2-	30.5 s *2*
196AU	0.0	2-	6.1669 d *6*
196AU	84.656 *20*	5+	8.1 s *2*
196AU	595.66 *4*	12-	9.6 h *1*
197AU	0.0	3/2+	STABLE
197AU	409.15 *8*	11/2-	7.73 s *6*
198AU	0.0	2-	2.6941 d *2*
198AU	811.9 *15*	(12-)	2.272 d *16*
199AU	0.0	3/2+	3.139 d *7*
200AU	0	(1-)	48.4 m *3*
200AU	1010 *40*	12-	18.7 h *5*
201AU	0	3/2+	26.0 m *8*
202AU	0	(1-)	28.4 s *12*
203AU	0	3/2+	60 s *6*
204AU	0	(2-)	39.8 s *9*
205AU	0.0	(3/2+)	32.0 s *14*
205AU	907 *5*	(11/2-)	6 s *2*
206AU	0	5+,6+	40 s *15*
207AU	0		> 300 ns
209AU	0	(3/2+)	> 300 ns
210AU	0		> 300 ns
179HG	0.0	(7/2-)	1.05 s *3*
180HG	0.0	0+	2.59 s *1*
181HG	0.0	1/2-	3.6 s *1*
182HG	0.0	0+	10.83 s *6*
183HG	0.0	1/2-	9.4 s *7*
184HG	0.0	0+	30.87 s *26*
185HG	0.0	1/2-	49.1 s *10*
185HG	99.3 *5*	13/2+	21.6 s *15*
186HG	0.0	0+	1.38 m *10*
187HG	0.0	3/2(-)	1.9 m *3*
187HG	0.0+X	13/2(+)	2.4 m *3*
188HG	0.0	0+	3.25 m *15*
189HG	0.0	3/2-	7.6 m *2*
189HG	0.0+X	13/2+	8.6 m *2*
190HG	0.0	0+	20.0 m *5*
191HG	0.0	3/2(-)	49 m *10*
191HG	0.0+X	13/2(+)	50.8 m *15*
192HG	0.0	0+	4.85 h *20*
193HG	0.0	3/2(-)	3.80 h *15*
193HG	140.76 *5*	13/2(+)	11.8 h *2*

194HG	0.0	0+	447 y *52*
195HG	0.0	1/2-	10.53 h *3*
195HG	176.07 *4*	13/2+	41.6 h *8*
196HG	0.0	0+	STABLE
197HG	0.0	1/2-	64.14 h *5*
197HG	298.93 *8*	13/2+	23.8 h *1*
198HG	0.0	0+	STABLE
199HG	0.0	1/2-	STABLE
199HG	532.48 *10*	13/2+	42.67 m *9*
200HG	0.0	0+	STABLE
201HG	0	3/2-	STABLE
202HG	0	0+	STABLE
203HG	0	5/2-	46.610 d *10*
204HG	0	0+	STABLE
205HG	0.0	1/2-	5.14 m *9*
206HG	0.0	0+	8.32 m *7*
207HG	0	(9/2+)	2.9 m *2*
208HG	0	0+	41 m *+5-4*
209HG	0	(9/2+)	36 s *+7-4*
211HG	0		> 300 ns
216HG	0	0+	> 300 ns
180TL	0.0	(5-)	1.09 s *1*
181TL	0.0	(1/2+)	3.2 s *3*
182TL	0.0	(7+)	3.1 s *10*
183TL	0.0	(1/2+)	6.9 s *7*
184TL	0		10.1 s *5*
185TL	0.0	(1/2+)	19.5 s *5*
185TL	454.8 *15*	(9/2-)	1.93 s *8*
186TL	0.0	(2-)	3.4 s *+5-4*
186TL	40 *39*	(7+)	27.5 s *10*
186TL	414 *39*	(10-)	3.32 s *11*
187TL	0.0	(1/2+)	≈ 51 s
187TL	334 *4*	(9/2-)	15.60 s *12*
188TL	0.0	(2-)	71 s *2*
188TL	35 *31*	7+	71.5 s *15*
189TL	0.0	(1/2+)	2.3 m *2*
189TL	281 *7*	(9/2-)	1.4 m *1*
190TL	0.0	2-	2.6 m *3*
190TL	83 *10*	7+	3.6 m *3*
190TL	151.3 *3*	1+,2+,3+	> 34 ns
190TL	325.2 *5*	(9-)	> 1 µs
191TL	0.0+X	9/2(-)	5.22 m *16*
192TL	0.0	(2-)	9.6 m *4*
192TL	138 *45*	(7+)	10.8 m *2*
193TL	0.0	1/2(+)	21.6 m *8*
193TL	365.2+X	(9/2-)	2.11 m *15*
194TL	0.0	2-	33.0 m *5*
194TL	260 *14*	(7+)	32.8 m *2*
194TL	3687.1 *6*	(19-)	> 1.18 ps
194TL	3887.1 *6*	(20-)	> 0.83 ps
194TL	4819.2 *7*	(23-)	> 1.04 ps
195TL	0.0	1/2+	1.16 h *5*
195TL	482.63 *17*	9/2-	3.6 s *4*
196TL	0.0	2-	1.84 h *3*
196TL	394.2 *5*	(7+)	1.41 h *2*
197TL	0.0	1/2+	2.84 h *4*
198TL	0.0	2-	5.3 h *5*
198TL	543.6 *4*	7+	1.87 h *3*
199TL	0.0	1/2+	7.42 h *8*
200TL	0.0	2-	26.1 h *1*

201TL	0	1/2+	3.0420 d *16*
202TL	0	2-	12.31 d *8*
203TL	0.0	1/2+	STABLE
204TL	0	2-	3.783 y *12*
205TL	0.0	1/2+	STABLE
206TL	0.0	0-	4.202 m *11*
206TL	2643.10 *18*	(12-)	3.74 m *3*
207TL	0	1/2+	4.77 m *3*
207TL	1348.18 *16*	11/2-	1.33 s *11*
208TL	0.0	5+	3.053 m *4*
208TL	328.04 *5*	5+	> 0.1 ps
209TL	0.0	1/2+	2.162 m *7*
210TL	0.0	(5+)	1.30 m *3*
211TL	0		88 s *+46-29*
212TL	0.0	(5+)	30.9 s *80*
213TL	0	(1/2+)	23.8 s *44*
214TL	0		11.0 s *24*
215TL	0.0		9.7 s *38*
216TL	0		> 300 ns
185PB	0.0	3/2-	6.3 s *4*
185PB	0.0+X	13/2+	4.3 s *2*
186PB	0.0	0+	4.81 s *3*
187PB	0.0	(3/2-)	15.2 s *3*
187PB	33 *13*	(13/2+)	18.3 s *3*
188PB	0	0+	25.5 s *1*
189PB	0.0	(3/2-)	39 s *8*
189PB	40 *4*	(13/2+)	50 s *3*
190PB	0.0	0+	71 s *1*
191PB	0.0	(3/2-)	1.33 m *8*
191PB	0.0+X	(13/2+)	2.18 m *8*
192PB	0.0	0+	3.5 m *1*
193PB	0.0+X	(13/2+)	5.8 m *2*
194PB	0.0	0+	10.7 m *6*
194PB	6535.47 *21*	(18+)	> 0.5 ps
195PB	0.0	3/2-	≈ 15 m
195PB	202.9 *7*	13/2+	15.0 m *12*
196PB	0.0	0+	37 m *3*
197PB	0.0	3/2-	8.1 m *17*
197PB	319.31 *11*	13/2+	42.9 m *9*
198PB	0.0	0+	2.4 h *1*
198PB	4573.2 *6*	14-	> 2.8 ps
198PB	4702.5 *6*	(16+)	> 5.5 ps
198PB	4837.2 *6*	15-	> 2.8 ps
199PB	0	3/2-	90 m *10*
199PB	424.8+X *2*	(13/2+)	12.2 m *3*
200PB	0.0	0+	21.5 h *4*
201PB	0	5/2-	9.33 h *5*
201PB	629.1 *3*	13/2+	60.8 s *18*
202PB	0	0+	$52.5\times10^{+3}$ y *28*
202PB	2169.85 *8*	9-	3.54 h *2*
203PB	0	5/2-	51.92 h *3*
203PB	825.11 *10*	13/2+	6.21 s *8*
204PB	0.0	0+	≥ $1.4\times10^{+17}$ y
204PB	2185.88 *8*	9-	66.93 m *10*
205PB	0.0	5/2-	$1.70\times10^{+7}$ y *9*
206PB	0.0	0+	STABLE
207PB	0.0	1/2-	STABLE
207PB	3175.674 *13*	9/2(+)	> 402 fs
207PB	3225.542 *20*	11/2+	> 333 fs
207PB	3384.579 *13*	9/2+	> 284 fs

207PB	3429.843 *18*	(9/2+)	> 437 fs
207PB	3476.364 *13*	9/2(+)	> 388 fs
207PB	3509.849 *16*	11/2+	> 208 fs
207PB	3620.496 *21*	11/2+	> 243 fs
207PB	3650.09 *3*	9/2-,11/2-	> 312 fs
207PB	3673.82 *3*	9/2,11/2	> 263 fs
207PB	3711.40 *3*	(7/2+)	> 118 fs
207PB	3726.094 *22*	(5/2+,7/2+)	> 201 fs
207PB	3828.997 *18*	9/2+,11/2+	> 111 fs
207PB	3869.37 *5*	9/2+,11/2+,13/2+	> 104 fs
207PB	3903.33 *10*	(13/2+)	> 17 fs
207PB	4064.02 *8*	(9/2+,11/2+,13/2+)	> 37 fs
208PB	0	0+	STABLE
208PB	3919.966 *13*	6-	> 690 fs
208PB	3946.578 *14*	4-	> 430 fs
208PB	3995.438 *13*	4-	> 690 fs
208PB	4037.443 *14*	7-	> 690 fs
208PB	4125.347 *12*	5-	> 490 fs
208PB	4206.277 *14*	6-	> 690 fs
208PB	4261.871 *13*	4-	> 520 fs
208PB	4383.285 *17*	6-	> 690 fs
208PB	4423.647 *15*	6+	> 110 fs
208PB	4680.266 *22*	7-	> 690 fs
208PB	4711.817 *21*	4-	> 340 fs
208PB	4860.78 *6*	8+	> 22 fs
208PB	4867.91 *4*	7+	> 97 fs
208PB	4868.35 *5*	0+	> 312 fs
208PB	4962.428 *21*	4(-),5(+)	> 440 fs
208PB	5085.470 *24*	7-	> 229 fs
208PB	5092.99 *3*	8+	> 690 fs
208PB	5193.428 *25*	5+	> 319 fs
208PB	5195.37 *10*	7+	> 690 fs
208PB	5241.1 *3*	0+	> 690 fs
208PB	5280.47 *4*	0-	> 319 fs
208PB	5317.041 *18*	(3)+	> 690 fs
208PB	5599.48 *6*	0-	> 159 fs
208PB	5799.41 *9*		> 690 fs
208PB	6101.1 *10*	(5+)	> 690 fs
209PB	0	9/2+	3.234 h 7
210PB	0.0	0+	22.20 y *22*
211PB	0.0	9/2+	36.1 m *2*
212PB	0.0	0+	10.622 h 7
213PB	0.0	(9/2+)	10.2 m *3*
214PB	0.0	0+	27.06 m 7
215PB	0	(9/2+)	147 s *12*
216PB	0	0+	> 300 ns
217PB	0		19.9 s *53*
218PB	0	0+	15 s 7
220PB	0	0+	> 300 ns
188BI	65 *29*		> 5 µs
190BI	0	(3+)	6.3 s *1*
190BI	191 *65*	(10-)	6.2 s *1*
191BI	0.0	(9/2-)	12.4 s *3*
192BI	0.0	(3+)	34.6 s *9*
192BI	147 *34*	(10-)	39.6 s *4*
193BI	0.0	(9/2-)	63.6 s *30*
193BI	305 *6*	(1/2+)	3.20 s *14*
194BI	0.0	(3+)	95 s *3*
194BI	145 *50*	(6+,7+)	125 s *2*
194BI	161 *8*	(10-)	115 s *4*

195BI	0.0	[9/2-]	183 s *4*
195BI	401 *7*	[1/2+]	87 s *1*
196BI	0.0	(3+)	308 s *12*
196BI	169 *4*	(7+)	0.6 s *5*
196BI	271 *5*	(10-)	240 s *3*
197BI	0	(9/2-)	9.33 m *50*
197BI	500 *Syst.*	(1/2+)	5.04 m *16*
198BI	0.0	(2+,3+)	10.3 m *3*
198BI	0.0+X	7+	11.6 m *3*
198BI	248.5+X *5*	10-	7.7 s *5*
199BI	0.0	9/2-	27 m *1*
199BI	667 *4*	(1/2+)	24.70 m *15*
200BI	0	7+	36.4 m *5*
200BI	0+X	(2+)	31 m *2*
201BI	0	9/2-	103 m *3*
201BI	846.35 *18*	1/2+	58.5 m *11*
202BI	0	5+	1.71 h *4*
203BI	0	9/2-	11.76 h *5*
204BI	0	6+	11.22 h *10*
205BI	0.0	9/2-	14.91 d *7*
206BI	0.0	6+	6.243 d *3*
207BI	0	9/2-	31.55 y *4*
208BI	0.0	5+	$3.68\times10^{+5}$ y *4*
208BI	650.57 *10*	7+	> 1.0 ns
208BI	936.27 *6*	3+	> 1.7 ps
208BI	1539.39 *7*	2+,3+	> 1.2 ps
209BI	0.0	9/2-	2.01×10^{19} y *8*
210BI	0.0	1-	5.012 d *5*
210BI	271.31 *11*	9-	$3.04\times10^{+6}$ y *6*
211BI	0.0	9/2-	2.14 m *2*
212BI	0.0	1(-)	60.55 m *6*
212BI	239 *30*	(8-,9-)	25.0 m *2*
212BI	1478 *38*	(18-)	7.0 m *3*
213BI	0.0	9/2-	45.59 m *6*
214BI	0.0	1-	19.71 m *2*
214BI	539 *30*		> 93 s
215BI	0.0	(9/2-)	7.6 m *2*
215BI	1347.50+X	(25/2:29/2)(-)	36.9 s *6*
216BI	0.0	(6-,7-)	2.25 m *5*
216BI	X	(3)	6.6 m *21*
217BI	0.0	(9/2-)	98.5 s *13*
218BI	0	(6-,7-,8-)	33 s *1*
219BI	0	(9/2-)	22 s *7*
220BI	0		> 300 ns
221BI	0		> 300 ns
223BI	0		> 300 ns
195PO	0.0	(3/2-)	4.64 s *9*
195PO	≈230	(13/2+)	1.92 s *2*
196PO	0.0	0+	5.8 s *2*
197PO	0.0	(3/2-)	84 s *16*
197PO	204 *Syst.*	(13/2+)	32 s *2*
198PO	0.0	0+	1.760 m *24*
199PO	0.0	(3/2-)	5.47 m *15*
199PO	310 *2*	(13/2+)	4.17 m *5*
200PO	0.0	0+	11.54 m *9*
201PO	0	3/2-	15.50 m *22*
201PO	423.41 *22*	13/2+	8.96 m *12*
202PO	0	0+	44.6 m *4*
203PO	0	5/2-	36.7 m *5*
203PO	641.64 *14*	13/2+	45 s *2*

203PO	2158.3 *6*		> 200 ns
204PO	0	0+	3.519 h *12*
205PO	0.0	5/2-	1.74 h *8*
206PO	0.0	0+	8.8 d *1*
207PO	0	5/2-	5.80 h *2*
207PO	1383.16 *7*	19/2-	2.79 s *8*
208PO	0.0	0+	2.898 y *2*
209PO	0.0	1/2-	124 y *3*
210PO	0.0	0+	138.376 d *2*
211PO	1462 *5*	(25/2+)	25.2 s *6*
212PO	2930 *10*	(18+)	45.1 s *6*
217PO	0.0	(9/2+)	1.53 s *5*
218PO	0.0	0+	3.097 m *12*
219PO	0	(9/2+)	620 s *59*
220PO	0	0+	> 300 ns
221PO	0		112 s *+58-28*
222PO	0	0+	2 m *+12-1*
223PO	0		> 300 ns
225PO	0		> 300 ns
226PO	0	0+	> 300 ns
227PO	0		> 300 ns
197AT	52 *10*	(1/2+)	2.0 s *2*
198AT	0.0	(3+)	4.2 s *2*
198AT	102+X	(10-)	1.21 s *6*
199AT	0	(9/2-)	7.03 s *15*
200AT	0	(3+)	43.1 s *8*
200AT	112.9 *29*	(7+)	47 s *1*
200AT	343.8 *29*	(10-)	6.3 s *5*
201AT	0.0	9/2-	87.6 s *13*
202AT	0	(2+,3+)	184 s *1*
202AT	0+X	(7+)	182 s *2*
203AT	0	9/2-	7.4 m *2*
204AT	0	7+	9.12 m *11*
205AT	0.0	9/2-	26.9 m *8*
206AT	0.0	(5)+	30.6 m *8*
207AT	0	9/2-	1.81 h *3*
208AT	0.0	6+	1.63 h *3*
209AT	0	9/2-	5.42 h *5*
210AT	0.0	(5)+	8.1 h *4*
211AT	0.0	9/2-	7.214 h *7*
218AT	0	(3-,2-)	1.28 s *6*
219AT	0.0	(9/2-)	56 s *4*
220AT	0.0	3	3.71 m *4*
221AT	0.0		2.3 m *2*
222AT	0		54 s *10*
223AT	0.0		50 s *7*
224AT	0		1.3 m *+23-4*
225AT	0		> 300 ns
226AT	0		> 300 ns
227AT	0		> 300 ns
228AT	0		> 300 ns
229AT	0		> 300 ns
200RN	0.0	0+	1.03 s *3*
201RN	0.0	(3/2-)	7.0 s *4*
201RN	245 *12*	13/2+	3.8 s *1*
202RN	0	0+	9.7 s *1*
203RN	0.0	3/2-	44.2 s *16*
203RN	362 *4*	13/2+	26.9 s *5*
204RN	0	0+	74.5 s *14*
205RN	0.0	5/2-	170 s *4*

205RN	657.1 *5*	(13/2+)	> 10 s
206RN	0.0	0+	5.67 m *17*
207RN	0	5/2-	9.25 m *17*
208RN	0.0	0+	24.35 m *14*
209RN	0.0	5/2-	28.8 m *10*
210RN	0.0	0+	2.4 h *1*
211RN	0.0	1/2-	14.6 h *2*
212RN	0.0	0+	23.9 m *12*
219RN	0.0	5/2+	3.96 s *1*
220RN	0	0+	55.6 s *1*
221RN	0.0	7/2+	25 m *2*
222RN	0.0	0+	3.8222 d *9*
223RN	0.0	7/2	24.3 m *4*
224RN	0	0+	107 m *3*
225RN	0.0	7/2-	4.66 m *4*
226RN	0.0	0+	7.4 m *1*
227RN	0.0	(5/2)	20.2 s *4*
228RN	0.0	0+	65 s *2*
229RN	0		12.0 s *+12-13*
204FR	0	(3+)	1.8 s *3*
204FR	41 *7*	(7+)	1.6 s *+5-3*
204FR	316 *7*	(10-)	0.8 s *2*
205FR	0.0	9/2-	3.90 s *7*
206FR	0	(2+,3+)	≈ 16 s
206FR	0.0+X	(7+)	≈ 16 s
207FR	0	9/2-	14.8 s *1*
208FR	0.0	7+	59.1 s *3*
209FR	0.0	9/2-	50.5 s *7*
210FR	0.0	6+	3.18 m *6*
211FR	0.0	9/2-	3.10 m *2*
212FR	0.0	5+	20.0 m *6*
213FR	0.0	9/2-	34.17 s *6*
220FR	0	1+	27.4 s *3*
221FR	0.0	5/2-	4.9 m *2*
222FR	0	2-	14.2 m *3*
223FR	0.0	3/2(-)	22.00 m *7*
224FR	0.0	1(-)	3.33 m *10*
225FR	0.0	3/2-	3.95 m *14*
226FR	0.0	1-	49 s *1*
227FR	0.0	1/2+	2.47 m *3*
228FR	0.0	2-	38 s *1*
229FR	0.0		50.2 s *20*
230FR	0.0		19.1 s *5*
231FR	0.0	(1/2+)	17.6 s *6*
232FR	0.0	(5)	5.5 s *6*
233FR	0	(1/2+)	0.9 s *1*
207RA	0	(3/2-,5/2-)	1.35 s *-13+22*
208RA	0.0	0+	1.3 s *2*
209RA	0.0	5/2-	4.8 s *2*
210RA	0.0	0+	3.7 s *2*
211RA	0.0	5/2(-)	13 s *2*
212RA	0.0	0+	13.0 s *2*
213RA	0.0	1/2-	2.73 m *5*
214RA	0.0	0+	2.438 s *20*
221RA	0.0	5/2+	28 s *2*
222RA	0.0	0+	33.6 s *4*
223RA	0.0	3/2+	11.43 d *5*
223RA	130.141 *18*	9/2+	> 0.3 ns
224RA	0	0+	3.6316 d *23*
225RA	0.0	1/2+	14.9 d *2*

226RA	0.0	0+	1600 y 7
227RA	0.0	3/2+	42.2 m *5*
228RA	0	0+	5.75 y *3*
229RA	0.0	5/2+	4.0 m *2*
230RA	0.0	0+	93 m *2*
231RA	0.0	(5/2+)	103.9 s *14*
232RA	0	0+	4.2 m *8*
233RA	0	(1/2+)	30 s *5*
234RA	0.0	0+	30 s *10*
214AC	0.0	5(+)	8.2 s *2*
222AC	0	1-	4.9 s *5*
222AC	0+X		64 s *3*
223AC	0.0	(5/2-)	2.10 m *5*
224AC	0	(0-)	2.78 h *16*
225AC	0.0	(3/2-)	9.920 d *3*
226AC	0.0	(1)	29.37 h *12*
227AC	0.0	3/2-	21.772 y *3*
228AC	0	3+	6.15 h *2*
229AC	0.0	(3/2+)	62.7 m *5*
230AC	0.0	(1+)	122 s *3*
231AC	0.0	1/2+	7.5 m *1*
232AC	0	(1+)	119 s *5*
233AC	0	(1/2+)	143 s *10*
234AC	0.0		44 s *7*
235AC	0		62 s *4*
236AC	0		1.2 m *+58-5*
215TH	0.0	(1/2-)	1.2 s *2*
224TH	0.0	0+	1.04 s *2*
225TH	0.0	(3/2+)	8.75 m *4*
226TH	0.0	0+	30.57 m *10*
227TH	0.0	(1/2+)	18.697 d 7
228TH	0.0	0+	1.9116 y *16*
229TH	0.0	5/2+	7880 y *120*
230TH	0.0	0+	$7.54\times10^{+4}$ y *3*
230TH	1009.601 *14*	2+	≥ 0.8 ps
231TH	0.0	5/2+	25.57 h *8*
232TH	0	0+	1.40×10^{10} y *1*
233TH	0.0	1/2+	21.83 m *4*
234TH	0.0	0+	24.10 d *3*
235TH	0	(1/2+)	7.2 m *1*
236TH	0	0+	37.5 m *2*
237TH	0.0	(5/2+)	4.8 m *5*
238TH	0.0	0+	9.4 m *20*
211PA	0		> 300 ns
225PA	0.0		1.7 s *2*
226PA	0.0		1.8 m *2*
227PA	0.0	(5/2-)	38.3 m *3*
228PA	0.0	3+	22 h *1*
229PA	0.0	(5/2+)	1.50 d *5*
230PA	0.0	2-	17.4 d *5*
231PA	0.0	3/2-	32570 y *130*
232PA	0	(2-)	1.32 d *2*
233PA	0.0	3/2-	26.975 d *13*
234PA	0.0	4+	6.70 h *5*
234PA	73.92+X	(0-)	1.159 m *11*
235PA	0	(3/2-)	24.4 m *2*
236PA	0	1(+)	9.1 m *1*
237PA	0.0	(1/2+)	8.7 m *2*
238PA	0.0	(3-)	2.28 m *10*
239PA	0.0	(3/2)	1.8 h *5*

227U	0.0	(3/2+)	1.1 m *1*
228U	0.0	0+	9.1 m *2*
229U	0.0	(3/2+)	58 m *3*
230U	0.0	0+	20.23 d *2*
231U	0.0	(5/2-)	4.2 d *1*
232U	0	0+	68.9 y *4*
233U	0.0	5/2+	1.5919×10^{5} y *15*
234U	0.0	0+	$2.455\times10^{+5}$ y *6*
234U	851.74 *3*	2+	≥ 1.74 ps
235U	0.0	7/2-	$7.04\times10^{+8}$ y *1*
235U	0.0760 *4*	1/2+	≈ 26 m
236U	0.0	0+	2.342×10^{7} y *4*
237U	0.0	1/2+	6.752 d *2*
238U	0.0	0+	4.468×10^{9} y *6*
239U	0	5/2+	23.45 m *2*
239U	0.0+X	(5/2+)	> 0.25 μs
240U	0	0+	14.1 h *1*
242U	0.0	0+	16.8 m *5*
228NP	0.0		61.4 s *14*
229NP	0.0		4.0 m *2*
230NP	0.0		4.6 m *3*
231NP	0	(5/2-)	48.8 m *2*
232NP	0	(4+)	14.7 m *3*
233NP	0.0	(5/2+)	36.2 m *1*
234NP	0.0	(0+)	4.4 d *1*
235NP	0	5/2+	396.1 d *12*
236NP	0	6(-)	$1.55\times10^{+5}$ y *1*
236NP	57 *51*	1(-)	22.5 h *4*
237NP	0.0	5/2+	$2.144\times10^{+6}$ y *7*
238NP	0.0	2+	2.099 d *2*
239NP	0	5/2+	2.356 d *3*
240NP	0.0	(5+)	61.9 m *2*
240NP	0+X	(1+)	7.22 m *2*
241NP	0.0	5/2+	13.9 m *2*
242NP	0.0	(1+)	2.2 m *2*
242NP	0.0+X	(6+)	5.5 m *1*
243NP	0.0	(5/2)	1.85 m *15*
244NP	0.0	(7-)	2.29 m *16*
228PU	0.0	0+	1.1 s *+20-5*
229PU	0.0	(3/2+)	90 s *+71-27*
230PU	0.0		102 s *10*
231PU	0	(3/2+)	8.6 m *5*
232PU	0	0+	33.8 m *7*
233PU	0		20.9 m *4*
234PU	0.0	0+	8.8 h *1*
235PU	0	(5/2+)	25.3 m *5*
236PU	0	0+	2.858 y *8*
237PU	0.0	7/2-	45.64 d *4*
238PU	0.0	0+	87.7 y *1*
239PU	0	1/2+	24110 y *30*
240PU	0.0	0+	6561 y *7*
241PU	0.0	5/2+	14.329 y *29*
242PU	0.0	0+	$3.73\times10^{+5}$ y *2*
243PU	0.0	7/2+	4.956 h *3*
244PU	0.0	0+	$8.13\times10^{+7}$ y *3*
244PU	1211.2 *8*	8-	1.75 s *12*
245PU	0	(9/2-)	10.54 h *6*
246PU	0	0+	10.84 d *2*
247PU	0.0	(1/2+)	2.27 d *23*

229AM	0		0.9 s *+21-7*
230AM	0.0		31 s
232AM	0		79 s *2*
233AM	0		3.2 m *8*
234AM	0.0		2.32 m *8*
235AM	0.0	5/2-	10.3 m *6*
236AM	0.0	5-	3.6 m *2*
236AM	X	(1-)	2.9 m *2*
237AM	0.0	5/2(-)	73.6 m *8*
238AM	0.0	1+	98 m *2*
239AM	0	(5/2)-	11.9 h *1*
240AM	0	(3-)	50.8 h *3*
241AM	0.0	5/2-	432.6 y *6*
242AM	0.0	1-	16.01 h *2*
242AM	48.603 *9*	5-	141 y *2*
243AM	0.0	5/2-	7364 y *22*
244AM	0.0	(6-)	10.1 h *1*
244AM	89.5 *16*	1+	26 m
245AM	0.0	5/2+	2.05 h *1*
246AM	0.0	(7-)	39 m *3*
246AM	0.0+X	2(-)	25.0 m *2*
247AM	0.0	(5/2)	23.0 m *13*
233CM	0		23 s *+13-6*
234CM	0.0	0+	51 s *12*
236CM	0	0+	6.8 m *8*
238CM	0.0	0+	2.2 h *4*
239CM	0	(7/2-)	2.7 h *8*
240CM	0	0+	27 d *1*
241CM	0.0	1/2+	32.8 d *2*
242CM	0.0	0+	162.88 d *8*
243CM	0.0	5/2+	29.1 y *1*
244CM	0.0	0+	18.11 y *3*
244CM	0+X		> 500 ns
245CM	0.0	7/2+	8423 y *74*
246CM	0	0+	4706 y *40*
247CM	0.0	9/2-	$1.56\times10^{+7}$ y *5*
248CM	0.0	0+	$3.48\times10^{+5}$ y *6*
249CM	0	1/2+	64.15 m *3*
250CM	0.0	0+	$\approx 8.3\times10^{+3}$ y
251CM	0	(1/2+)	16.8 m *2*
252CM	0.0	0+	< 2 d
233BK	0		21 s *+48-17*
234BK	0.0		1.4×10^{2} s *+14-5*
236BK	0	(4+,6-)	22 s *+13-6*
238BK	0.0		144 s *5*
240BK	0		4.8 m *8*
241BK	0.0	(7/2+)	4.6 m *4*
242BK	0.0		7.0 m *13*
243BK	0.0	(3/2-)	4.6 h *2*
244BK	0.0	(4-)	5.02 h *3*
245BK	0.0	(3/2-)	4.96 d *3*
246BK	0.0+X	2(-)	1.80 d *2*
247BK	0.0	3/2-	1380 y *250*
248BK	0.0+Z	(6+,8-)	> 9 y
248BK	0.0+X	1(-)	23.7 h *2*
249BK	0.0	7/2+	330 d *4*
250BK	0.0	2-	3.212 h *5*
251BK	0	(3/2-)	56 m *1*
253BK	X		> 10 m
237CF	0.0		2.1 s *3*

239CF	0		39 s *+37-12*
240CF	0	0+	0.96 m *15*
241CF	0.0	(7/2-)	3.78 m *70*
242CF	0.0	0+	3.5 m *2*
243CF	0.0	(1/2+)	10.7 m *5*
244CF	0.0	0+	19.4 m *6*
245CF	0.0	1/2+	45.0 m *14*
246CF	0	0+	35.7 h *5*
247CF	0.0	(7/2+)	3.11 h *3*
248CF	0	0+	333.5 d *28*
249CF	0	9/2-	351 y *2*
250CF	0.0	0+	13.08 y *9*
251CF	0	1/2+	898 y *44*
252CF	0.0	0+	2.647 y *3*
253CF	0.0	(7/2+)	17.81 d *8*
254CF	0	0+	60.5 d *2*
255CF	0	(7/2+)	85 m *18*
256CF	0.0	0+	12.3 m *12*
240ES	0	(1+)	6 s *2*
241ES	0.0		8 s *+6-5*
242ES	0.0		17.8 s *16*
243ES	0.0+X	(7/2+)	21 s *2*
244ES	0.0		37 s *4*
245ES	0.0	(3/2-)	66.6 s *60*
246ES	0.0+X		7.5 m *5*
247ES	0+X	(7/2+)	4.55 m *26*
248ES	0.0	(2-,0+)	24 m *3*
249ES	0	7/2+	102.2 m *6*
250ES	0.0	(6+)	8.6 h *1*
250ES	0.0+X	1(-)	2.22 h *5*
251ES	0	3/2-	33 h *1*
252ES	0.0	(5-)	471.7 d *19*
253ES	0	7/2+	20.47 d *3*
254ES	0.0	(7+)	275.7 d *5*
254ES	84.2 *25*	2+	39.3 h *2*
255ES	0	(7/2+)	39.8 d *12*
256ES	0.0	(1+,0-)	25.4 m *24*
256ES	0.0+X	(8+)	7.6 h
257ES	0.0		7.7 d *2*
245FM	0.0	(1/2+)	5.6 s *7*
246FM	0	0+	1.54 s *4*
247FM	0.0	(7/2+)	31 s *1*
247FM	45 *7*	(1/2+)	5.1 s *2*
248FM	0	0+	34.5 s *12*
249FM	0	(7/2+)	2.6 m *7*
250FM	0.0	0+	30 m *3*
250FM	0.0+X		1.8 s *1*
251FM	0	(9/2-)	5.30 h *8*
252FM	0.0	0+	25.39 h *4*
253FM	0.0	1/2+	3.00 d *12*
254FM	0.0	0+	3.240 h *2*
255FM	0.0	7/2+	20.07 h *7*
256FM	0.0	0+	157.1 m *13*
257FM	0.0	(9/2+)	100.5 d *2*
259FM	0		1.5 s *2*
246MD	0+X		0.9 s *2*
246MD	0+Y		4.4 s *8*
247MD	0.0	(7/2-)	1.2 s *1*
248MD	0.0		7 s *3*
249MD	0.0	(7/2-)	21.7 s *20*

249MD	0.0+X	(1/2-)	1.9 s *9*
250MD	0.0		52 s *6*
251MD	0	7/2-	4.27 m *11*
251MD	≥844	(23/2+)	1.4 s *3*
252MD	0.0		2.3 m *8*
253MD	0	(7/2-)	6 m *+12-3*
254MD	0		10 m *3*
254MD	0+X		28 m *8*
255MD	0	(7/2-)	27 m *2*
256MD	0.0	(1-)	77.7 m *18*
257MD	0.0	(7/2-)	5.52 h *5*
258MD	0	(8-)	51.50 d *29*
258MD	0+X	(1-)	57.0 m *9*
259MD	0		1.60 h *6*
260MD	0.0		31.8 d *5*
251NO	106 *6*	(1/2+)	1.00 s *4*
252NO	0	0+	2.46 s *2*
253NO	0	(9/2-)	1.62 m *15*
254NO	0.0	0+	51.2 s *4*
255NO	0.0	(1/2+)	3.52 m *21*
256NO	0.0	0+	2.91 s *5*
257NO	0	(3/2+)	24.5 s *5*
259NO	0	(9/2+)	58 m *5*
253LR	0+Y	(1/2-)	1.49 s *+30-21*
254LR	0		18.1 s *18*
255LR	0.0	[1/2-]	31.1 s *11*
255LR	38 *10*	[7/2-]	2.54 s *5*
255LR	878.8+Y *10*	(19/2-)	≥ 10 ns
256LR	0.0		27.9 s *10*
257LR	0		≈ 4 s
258LR	0		3.92 s *33*
259LR	0.0		6.2 s *3*
260LR	0.0		180 s *30*
261LR	0.0		39 m *12*
262LR	0.0		≈ 4 h
264LR	0		4.9 h *+21-13*
266LR	0		11 h *+21-5*
255RF	0.0	(9/2-)	1.68 s *9*
257RF	0.0	(1/2+)	4.4 s *+6-5*
257RF	≈75	(11/2-)	4.1 s *4*
259RF	0.0		2.4 s *4*
261RF	X		68 s *+3-3*
261RF	234+X *57*		1.9 s *4*
262RF	0.0	0+	2.3 s *4*
263RF	0.0		10 m *2*
265RF	0		1.0 m *+12-3*
267RF	0		1.3 h *+23-5*
255DB	0		1.6 s *+6-4*
256DB	0.0		1.6 s *+5-3*
257DB	0.0	(9/2+)	2.3 s *2*
258DB	0.0	(5+,6+)	4.3 s *5*
258DB	0+X	(1-)	1.9 s *5*
258DB	0+Y		20 s *10*
260DB	0.0		1.52 s *13*
261DB	0.0		1.8 s *4*
262DB	0.0		35 s *5*
263DB	0.0		27 s *+10-7*
266DB	0		0.4 h *+17-2*
267DB	0		79 m *+94-28*
268DB	0		28 h *3*

270DB	0		15 h *+10-4*
263SG	0.0		1.0 s *2*
265SG	X		14.4 s *+37-25*
265SG	152+X *71*		8.5 s *+26-16*
267SG	0		84 s *+55-24*
269SG	0		1.3×10^{2} s *+10-4*
271SG	0		96 s *+88-31*
264BH	0.0		0.44 s *+60-16*
266BH	0		2.1 s *+29-8*
267BH	0		14 s *+6-3*
270BH	0		1.0 m *+49-5*
271BH	0		1.5 s *+28-6*
272BH	0.0		10.5 s *+15-11*
274BH	0		44 s *+34-13*
278BH	0		19 m *+55-5*
267HS	X		0.8 s *+40-4*
268HS	0	0+	0.4 s *+18-2*
269HS	0		13 s *+10-4*
270HS	0	0+	7.6 s *+49-22*
278HS	0	0+	19 m *+55-5*
270MT	0		0.48 s *+66-18*
274MT	0		0.44 s *+81-17*
276MT	0+X		4 s *+5-1*
278MT	0		4.5 s *+35-13*
282MT	0		1.1 m *+53-5*
281DS	0		12 s *+4-2*
282DS	0	0+	1.1 m *+53-5*
280RG	0		4.4 s *+5-4*
281RG	0		15 s *+4-3*
282RG	0		100 s *+70-30*
286RG	0		11 m *+51-5*
283CN	0		4.6 s *+10-7*
285CN	0		33 s *+10-6*
286CN	0	0+	11 m *+51-5*
284NH	0		0.97 s *+12-10*
285NH	0		0.93 s *+45-23*
286NH	0		9.5 s *+63-27*
290NH	0		2 s *+10-1*
289FL	0		2.4 s *+8-5*
290FL	0	0+	19 s *+91-9*
290MC	0		0.65 s *+49-20*

Gamma Information

E_{level}(keV)	Jπ	$T_{1/2}$	E_γ(keV)	I_γ	γ mult.	γ mix. ratio
19.28E3 *7*		> 0.75 MeV				
19.28E3 *7*		> 0.75 MeV				
2371.5 *10*	9/2+	> 2.4 ps	2371.5	100	E2+(M3)	0.002 *50*
3067.4 *16*	(3/2)+	≥ 0.7 ps	1595.7	100		
3153.5 *17*	5/2+	≥ 0.7 ps	3153.5	8 *4*		
3153.5 *17*	5/2+	≥ 0.7 ps	3057.5	92 *4*		
6500.0 *9*	11/2+	> 2.4 eV	3720.2	55	M1	
6500.0 *9*	11/2+	> 2.4 eV	1852	45	M1	
4635 *4*	13/2+	> 0.7 ps	1840	100	E2	
3884.6 *4*	(5/2+,9/2+)	> 0.5 ps	1944	100 *21*		
3884.6 *4*	(5/2+,9/2+)	> 0.5 ps	775	7 *4*		
3884.6 *4*	(5/2+,9/2+)	> 0.5 ps	2186	8.6 *25*		
3884.6 *4*	(5/2+,9/2+)	> 0.5 ps	457	7 *4*		
1058 *2*	0+	> 7 ns	172	100	[E2]	
1058 *2*	0+	> 7 ns	1058		[E0]	

4192 *4*	3/2+	> 0.5 keV	3740 *4*	100	M1+E2	+0.18 *1*	
4192 *4*	3/2+	> 0.5 keV	3247 *4*	100	M1+E2	-0.07 *3*	
3977.91 *9*	0-	> 1.0 ps	2919.99	59.7 *16*	[E1]		
3977.91 *9*	0-	> 1.0 ps	2127.20	100.0 *16*	[E1]		
3977.91 *9*	0-	> 1.0 ps	1906.19	1.5 *3*	[E1]		
5785.7 *16*	(0,1,2)+	≥ 0.8 ps	3844.0 *15*	100			
2228.6 *4*	2(-)	> 2 ps	620.6 *4*	68 *14*	(E1(+M2))	+0.07 *16*	
2228.6 *4*	2(-)	> 2 ps	2229 *1*	59 *14*	[E1]		
2228.6 *4*	2(-)	> 2 ps	1799.7 *6*	100 *16*	[E1]		
2320.6 *4*	3(-)	> 7 ps	1891.4 *5*	100	(E1(+M2))	+0.07 *14*	
6237.2 *5*	7(+)	> 6.9 ps	2884.3 *6*	90 *13*	M2(+E3)	+0.11 *18*	
6237.2 *5*	7(+)	> 6.9 ps	1607.5 *4*	100 *13*	(E1(+M2))	+0.05 *9*	
6237.2 *5*	7(+)	> 6.9 ps	3931.7 *9*	13 *8*	[E3]		
6237.2 *5*	7(+)	> 6.9 ps	842.5 *6*	48 *10*	(E1(+M2))	+0.05 *14*	
7920.1 *10*		> 0.35 ps	1683 *1*	100 *6*	D,E2		
7920.1 *10*		> 0.35 ps	1726 *1*	49 *6*	D,E2		
3667.5 *10*		> 1 ps	1456.6 *11*	100			
5391.4 *9*	2+	> 0.2 ps	816.2 *4*	18 *9*			
5391.4 *9*	2+	> 0.2 ps	5391.0	100 *9*			
2825.3 *11*	4+	> 0.14 ps	1533.2 *10*	100			
146.36 *3*	3+	31.99 m *3*	146.36 *3*	100	[M3]		0.1
2721.1 *2*	2-	> 1.4 ps	2260.7 *5*	100.0 *15*	E1		
2721.1 *2*	2-	> 1.4 ps	833.8	4 *4*			
2721.1 *2*	2-	> 1.4 ps	2721.0	32.9 *13*			
2721.1 *2*	2-	> 1.4 ps	2055.5	16 *9*			
2721.1 *2*	2-	> 1.4 ps	563.2	15 *9*			
2721.1 *2*	2-	> 1.4 ps	2574.6	39.1 *9*			
2721.1 *2*	2-	> 1.4 ps	1490.7	4.5 *4*			
5540.8 *11*	3-	> 0.7 ps	1941.0	100 *8*	D,E2		
5540.8 *11*	3-	> 0.7 ps	5540.8	<4			
5540.8 *11*	3-	> 0.7 ps	4875.4	<6			
5540.8 *11*	3-	> 0.7 ps	5394.4	<5			
5540.8 *11*	3-	> 0.7 ps	1996.2	56 *9*	D,E2		
5540.8 *11*	3-	> 0.7 ps	5079.9	<3			
4810.9 *3*	7/2	> 0.35 ps	1184.1	<1.0			
4810.9 *3*	7/2	> 0.35 ps	1724.7	<1.0			
4810.9 *3*	7/2	> 0.35 ps	1103.1	<1.0			
4810.9 *3*	7/2	> 0.35 ps	4820 *15*	100			
4810.9 *3*	7/2	> 0.35 ps	1708	<2.0			
4810.9 *3*	7/2	> 0.35 ps	1069.8	21 *3*	D(+Q)	+0.03 *2*	
4810.9 *3*	7/2	> 0.35 ps	3084.2	<1.0			
6046.17 *8*	11/2+	> 1.4 ps	1500.1 *3*	9 *2*			
6046.17 *8*	11/2+	> 1.4 ps	451.2 *1*	15.7 *12*			
6046.17 *8*	11/2+	> 1.4 ps	1142.4 *2*	6.4 *17*			
6046.17 *8*	11/2+	> 1.4 ps	2036.1 *1*	100 *7*	E1+M2	+0.18 *4*	
6046.17 *8*	11/2+	> 1.4 ps	1125.4 *4*	8 *2*			
396.42 *7*	1/2+	> 1.4 ps	396.42 *7*	100			
1301.21 *15*	(5/2+)	> 2.1 ps	1301.1 *3*	100.0 *21*			
1301.21 *15*	(5/2+)	> 2.1 ps	904.8 *5*	6.6 *21*	[E2]		
1785.86 *18*	(7/2-)	> 1.4 ps	484.64 *10*	100	[E1]		
2423.7 *3*	(9/2+)	> 1.2 ps	1122.9 *4*	36 *5*	[E2]		
2423.7 *3*	(9/2+)	> 1.2 ps	678.8	13 *5*			
2423.7 *3*	(9/2+)	> 1.2 ps	637.7 *3*	100 *5*	[E1]		
2834.3 *3*	(11/2+)	> 1.2 ps	1089.2 *4*	15 *4*	[E2]		
2834.3 *3*	(11/2+)	> 1.2 ps	410.65 *13*	100 *4*			
3873 *3*	0+	> 187 fs	1782 *3*	100	[E2]		
3873 *3*	0+	> 187 fs	585	<43			
4329.1 *7*	(0,1,2)+	> 485 fs	2358.6	100			
4329.1 *7*	(0,1,2)+	> 485 fs	4328.8	<10			
5974.8 *2*	(0+:3-)	> 1.7 ps	1409.3	30 *3*			

5974.8 *2*	(0+:3-)	> 1.7 ps	2038.2	17.3 *22*				
5974.8 *2*	(0+:3-)	> 1.7 ps	817.5	8.8 *13*				
5974.8 *2*	(0+:3-)	> 1.7 ps	5974.3	<5				
5974.8 *2*	(0+:3-)	> 1.7 ps	1494.8	<3				
5974.8 *2*	(0+:3-)	> 1.7 ps	3807.1	100 *5*				
6249.9 *3*	2+	> 111 fs	2313.3	<10				
6249.9 *3*	2+	> 111 fs	900.5	16.9 *26*				
6249.9 *3*	2+	> 111 fs	2872.9	20 *6*				
6249.9 *3*	2+	> 111 fs	1684.4	100 *8*				
6249.9 *3*	2+	> 111 fs	6249.3	<6				
6249.9 *3*	2+	> 111 fs	2439.6	<6				
6249.9 *3*	2+	> 111 fs	1092.6	10.6 *22*				
6249.9 *3*	2+	> 111 fs	4082.2	49 *8*				
6476.6 *19*	(0+:3-)	> 0.17 ps	2540.0	21 *3*				
6476.6 *19*	(0+:3-)	> 0.17 ps	1599.6	<3				
6476.6 *19*	(0+:3-)	> 0.17 ps	3099.6	<15				
6476.6 *19*	(0+:3-)	> 0.17 ps	1996.6	<10				
6476.6 *19*	(0+:3-)	> 0.17 ps	6476.0	<13				
6476.6 *19*	(0+:3-)	> 0.17 ps	2666.3	<11				
6476.6 *19*	(0+:3-)	> 0.17 ps	1911.0	100 *3*				
6476.6 *19*	(0+:3-)	> 0.17 ps	4308.9	43 *3*				
7289.6 *8*	(3-,4+)	> 55 fs	X					
7289.6 *8*	(3-,4+)	> 55 fs	3479.2	100 *8*				
7508.12 *22*	7-	≥ 42 fs	1100 *1*	2.2 *11*				
7508.12 *22*	7-	≥ 42 fs	2922.6 *6*	100 *6*	E2			
7508.12 *22*	7-	≥ 42 fs	437.8 *2*	8.8 *11*	(M1+E2)			
7508.12 *22*	7-	≥ 42 fs	1850 *1*	8 *3*	[E2]			
2358.284 *11*	1/2+	> 0.42 ps	1091.056 *8*	100.0 *20*				
2358.284 *11*	1/2+	> 0.42 ps	840.775 *25*	5.50 *13*				
2829.934 *17*	1/2+	> 0.69 ps	396.46 *4*	15.3 *6*	[E1]			2.(
2829.934 *17*	1/2+	> 0.69 ps	1562.704 *25*	100.0 *23*				
2829.934 *17*	1/2+	> 0.69 ps	1312.360 *20*	87.0 *21*				
4230 *2*	4(-)	> 2.8 ps	547 *2*	89 *4*	D+Q	-10 *+3-9*		
4230 *2*	4(-)	> 2.8 ps	1338 *2*	100 *4*	D(+Q)	+0.6 *+4-8*		
3096.1 *5*	4+	> 3.5 ps	1887.8 *4*	100	E2(+M3)	+0.07 *8*		
3439.4 *11*	(6+)	> 27.7 ps	693	100	[E2]			
2285.24 *12*	(5/2+,7/2+)	> 243 fs	914.4	<4				
2285.24 *12*	(5/2+,7/2+)	> 243 fs	905.0	<4				
2285.24 *12*	(5/2+,7/2+)	> 243 fs	2285.2	100	(Q+O)	+0.10 *5*		
3703.7 *4*	(1+,2,3+)	> 0.76 ps	1302.6 *3*					
2494.91 *3*	9/2+	> 3.1 ps	796.926 *20*	39.5 *21*	E2			1.4
2494.91 *3*	9/2+	> 3.1 ps	1201.303 *17*	67.1 *23*	E1+M2	+0.06 *2*		8.1
2494.91 *3*	9/2+	> 3.1 ps	817.659 *9*	100 *3*	M1+E2	+0.38 *2*		9.1
1206.91 *6*	(5/2,7/2)+	> 4.8 ps	1206.95 *9*	100				
2508.34 *10*	(11/2+)	> 5 ps	998.81 *13*	69 *4*	Q			
2508.34 *10*	(11/2+)	> 5 ps	460.5 *6*	100 *3*	D+Q	-0.2		
1438.3 *4*	(7/2+)	> 0.35 ps	575.5 *2*	100				
2104.2 *5*	(7/2-)	> 0.35 ps	1241.4 *4*	100				
3882 *2*	(3/2-,5/2,7/2+)	> 1.7 ps	1086					
3882 *2*	(3/2-,5/2,7/2+)	> 1.7 ps	3882					
3300.0 *4*	0+	> 0.9 ps	875.8	100 *1*	E2			
3300.0 *4*	0+	> 0.9 ps	1775.3	8 *4*	E2			
3913.80 *8*	5-	> 2 ps	628.71 *11*	92.7 *32*	(E1+M2)	-0.30 *14*		
3913.80 *8*	5-	> 2 ps	202.1 *2*	4.8	[M1,E2]			0.(
3913.80 *8*	5-	> 2 ps	869.47 *15*	100 *5*	(E1)			
1554.37 *8*	(11/2-)	> 2.1 ps	1554.34 *8*	100	(E2(+M3))	0.00 *6*		0.(
2877.99 *12*	(15/2-)	> 2.1 ps	1323.60 *9*	100	(E2(+M3))	0.00 *6*		8.2
2423.1 *8*	0+	> 4.5 ps	1077.5 *20*	100				
2013.53 *10*	3/2-	> 6 ps	2013.50 *14*	100	(E2)			0.(
2578.33 *10*	3/2+	> 12 ps	2578.26 *12*	42.2 *17*	(M2)			0.(

2578.33 *10*	3/2+	> 12 ps	564.79 *8*	100.0 *19*	(E1)		0.(
2599.53 *11*	1/2+	> 1 ps	586.01 *8*	100.0 *18*	(E1)		0.(
2599.53 *11*	1/2+	> 1 ps	2599.40 *20*	1.31 *9*	(E3)		0.(
2269.14 *4*	2+	> 70 fs	682.808 *23*	100 *70*	(D)		
2269.14 *4*	2+	> 70 fs	2269	38 *8*			
2269.14 *4*	2+	> 70 fs	379	12 *6*			
2269.14 *4*	2+	> 70 fs	1658	42 *6*	D(+Q)	-0.06 *6*	
2433.62 *18*	4+	> 0.14 ps	942.9 *2*	92 *8*	(M1+E2)	-0.48 *11*	
2433.62 *18*	4+	> 0.14 ps	922.7 *3*	100 *9*	(M1+E2)	+0.40 *9*	
2910.3 *7*	4+	> 0.8 ps	1419.0 *12*		D+Q	-0.14 *7*	
2995.53 *7*	4+	> 0.14 ps	772.6 *1*	100 *5*	(M1)		
2995.53 *7*	4+	> 0.14 ps	606.47	25 *13*			
3224.01 *20*	(5+)	> 0.21 ps	408.6 *2*	100 *9*	[M1]		
3224.01 *20*	(5+)	> 0.21 ps	1000.8 *3*	67 *6*	[E2]		
3224.01 *20*	(5+)	> 0.21 ps	834.9 *4*	83 *9*	[E2]		
3224.01 *20*	(5+)	> 0.21 ps	1713	55 *6*			
3321.36 *10*	(1+,2,3+)	> 0.14 ps	2710.22	100 *20*			
3321.36 *10*	(1+,2,3+)	> 0.14 ps	1830.9	100 *20*			
3718.6 *5*	(5+)	> 70 fs	3102.9				
3718.6 *5*	(5+)	> 70 fs	723.0 *3*				
2383.1 *4*	3/2(+)	> 0.31 ps	731.9	100			
2383.1 *4*	3/2(+)	> 0.31 ps	1527.6	45	(M1+E2)	+0.49 *7*	
3142.05 *12*	13/2+	> 0.55 ps	588.2 *1*	9.4 *3*	(M1+E2)		
3142.05 *12*	13/2+	> 0.55 ps	1209.8 *1*	100 *3*	E2		
271.241 *10*	6+	58.61 h *10*	271.241 *10*	100	E4		0.1
531.42 *14*	3(-)	> 3.8 ps	531.01 *21*	80 *4*	(E1(+M2))	-0.04 *3*	
531.42 *14*	3(-)	> 3.8 ps	181.6 *10*	4 *2*	[E1]		0.(
531.42 *14*	3(-)	> 3.8 ps	464.8 *5*	20 *4*	(E2)		
531.42 *14*	3(-)	> 3.8 ps	296.77 *20*	100 *4*	(M1(+E2))	-0.02 *3*	1.(
2106.3 *3*	15/2-	> 1.4 ps	869.57 *13*	100	E2		0.(
142.528 *7*	1-	18.75 s *4*	142.528 *8*	100.0	E3		0.(
2148.2 *5*		> 2 ps	1001.2 *5*	100	D(+Q)	+0.10 *13*	
3991.0 *9*	1/2+	≥ 0.7 ns	1762				
3991.0 *9*	1/2+	≥ 0.7 ns	1620.0 *15*				
1854.2 *12*	0+	> 0.14 ps	298.2	100	[E2]		
2676.6 *8*	4+	> 1.4 ps	1120.6	100	[E2]		
1904.4 *8*	0+	> 0.5 ps	821.3 *8*	100	[E2]		
1565.4 *7*	1/2+	> 2.8 ps	1528 *1*	14.9 *23*	(E1)		0.(
1565.4 *7*	1/2+	> 2.8 ps	1236 *1*	100.0 *23*	D,E2		
2364.9 *2*	1/2+	> 1.53 ps	540.0	100			
2682.30 *5*	11/2(-)	> 2.10 ps	1238 *2*	43	D,Q		
2682.30 *5*	11/2(-)	> 2.10 ps	276	1.4			
2682.30 *5*	11/2(-)	> 2.10 ps	1430.22 *4*	100	D(+Q)	0.00 *2*	
4564.8 *3*	8(+)	> 3.5 ps	1231.6 *5*	100.0 *22*	(E2)		8.9
4564.8 *3*	8(+)	> 3.5 ps	1056.2 *10*	11.1 *22*	[E2]		0.(
4956.6 *4*	(4+,5,6-)	> 1.0 ps	1173	100 *16*			
4956.6 *4*	(4+,5,6-)	> 1.0 ps	1624	45 *7*			
4956.6 *4*	(4+,5,6-)	> 1.0 ps	910	36 *7*			
4956.6 *4*	(4+,5,6-)	> 1.0 ps	1448	45 *7*			
6103.2 *7*	10(+),8	> 1.4 ps	1538.8 *10*	100			
7427.9 *7*	9,7	> 0.7 ps	2863	30 *8*			
7427.9 *7*	9,7	> 0.7 ps	2230	21 *5*			
7427.9 *7*	9,7	> 0.7 ps	1393	100 *9*			
4172.003 *19*	3+	> 0.83 ps	2618.33 *7*	100 *6*			
4172.003 *19*	3+	> 0.83 ps	1497.054 *25*	48 *3*			
1402.0 *4*	3+	> 0.8 ps	1045.5 *5*	28 *12*			
1402.0 *4*	3+	> 0.8 ps	1013.4 *3*	100 *5*	M1(+E2)	0.00 *20*	
1402.0 *4*	3+	> 0.8 ps	1081.6 *5*	24 *9*			
1402.0 *4*	3+	> 0.8 ps	493 *1*	21 *7*			
1677.4 *4*	3+	> 0.32 ps	375.5 *4*	100 *16*			

1677.4 *4*	3+	> 0.32 ps	1321.7 *3*	41 *16*				
1677.4 *4*	3+	> 0.32 ps	275.3 *5*	41 *11*				
1677.4 *4*	3+	> 0.32 ps	1288.6 *5*	45 *16*				
1752.5 *7*	3+,4+,5+	> 1.3 ps	1526					
1752.5 *7*	3+,4+,5+	> 1.3 ps	1432					
1752.5 *7*	3+,4+,5+	> 1.3 ps	1397					
1812.8 *15*	(2,3)+	> 2.9 ps	1457 *2*	100 *44*				
1812.8 *15*	(2,3)+	> 2.9 ps	1424 *2*	84 *44*				
1812.8 *15*	(2,3)+	> 2.9 ps	1493 *2*	<220				
1812.8 *15*	(2,3)+	> 2.9 ps	509					
2546.4 *6*	1/2+	> 0.7 ps	1619 *1*	100	E1			
3385.587 *23*	13/2-	> 0.87 ps	1776.38 *4*	100 *20*	M1+E2			
3385.587 *23*	13/2-	> 0.87 ps	1572.39 *7*	1.15 *25*				
3385.587 *23*	13/2-	> 0.87 ps	685.94 *3*	3.1 *6*				
1266.0 *9*	(7/2,9/2)-	> 1.1 ps	1265.7 *16*	100 *13*				
1266.0 *9*	(7/2,9/2)-	> 1.1 ps	1138.3 *16*	44 *13*				
1266.0 *9*	(7/2,9/2)-	> 1.1 ps	175.0 *14*	14 *3*				
1653 *4*	(9/2,11/2)-	> 0.45 ps	1652.5 *34*	100				
4085.2 *6*	(17/2,19/2-)	> 0.7 ps	1664.8 *5*	100				
2297.9 *3*	(7)	> 0.35 ps	1083.0 *3*	73				
2297.9 *3*	(7)	> 0.35 ps	469.11 *20*	100	D			
4876.0 *4*	(6-)	> 0.7 ps	811.9 *3*	37 *7*				0.(
4876.0 *4*	(6-)	> 0.7 ps	1342.6 *3*	100 *17*	[E2]			0.(
1703.2 *4*	1/2-	> 3.8 ps	1703.2 *5*	100	E2			0.(
1981.8 *3*	3/2+	> 1.39 ps	240	2.4 *6*	(E1)			0.(
1981.8 *3*	3/2+	> 1.39 ps	1709.5 *5*	16 *3*	(M2+E3)	-0.23 *21*		1.4
1981.8 *3*	3/2+	> 1.39 ps	278.1 *7*	26 *3*	(E1(+M2))			0.(
1981.8 *3*	3/2+	> 1.39 ps	1981.3 *5*	100 *3*	(E1+M2)			0.(
2978.7 *5*	(3/2+)	> 0.69 ps	1237	25 *5*	(E1)			1.2
2978.7 *5*	(3/2+)	> 0.69 ps	547	100 *11*				
2978.7 *5*	(3/2+)	> 0.69 ps	997	27 *5*	(M1)			6.8
2978.7 *5*	(3/2+)	> 0.69 ps	401	59 *11*				
2978.7 *5*	(3/2+)	> 0.69 ps	2979		(E1)			0.(
2978.7 *5*	(3/2+)	> 0.69 ps	810	40 *7*	(E1)			0.(
3892.2 *4*	13/2+	> 6.9 ps	2332 *1*	100	(E1)			0.(
3892.2 *4*	13/2+	> 6.9 ps	364.4 *4*	15.6	E1			0.(
3892.2 *4*	13/2+	> 6.9 ps	1395 *1*	15.6	(E1)			0.(
3892.2 *4*	13/2+	> 6.9 ps	702.2 *5*	9.6	(E1)			0.(
3785.71 *12*	(4)+	> 2.8 ps	1961.53 *11*	100 *10*				
3785.71 *12*	(4)+	> 2.8 ps	626.56 *27*	7 *3*				
3785.71 *12*	(4)+	> 2.8 ps	563.68 *19*	42 *2*				
3870.4 *5*		> 28 fs	3034.6 *13*					
3870.4 *5*		> 28 fs	1250.8 *5*					
3987.42 *21*		> 42 fs	594.0 *2*	100				
2681.8 *10*	(4+)	≥ 0.7 ps	850.1 *10*	39 *9*				
2681.8 *10*	(4+)	≥ 0.7 ps	359 *13*	31 *9*				
2681.8 *10*	(4+)	≥ 0.7 ps	1680 *15*	100 *12*				
3251.84 *17*	6+	≥ 0.7 ps	1175.1 *1*	100	E2			
4447.79 *20*	(7-)	≥ 0.7 ps	606.5 *1*	37 *5*				
4447.79 *20*	(7-)	≥ 0.7 ps	1196.3 *2*	100 *3*	D			
1917.11 *12*	5+	> 0.7 ps	773.6 *1*	100 *5*	E2			
1917.11 *12*	5+	> 0.7 ps	1258.0 *1*	22 *5*				
1917.11 *12*	5+	> 0.7 ps	886.7 *1*	35 *5*				
8277.4 *18*	(15+)	> 2 ps	1340					
1817.1 *2*	3/2(-)	> 0.7 ps	1817.1 *2*		(M1)			
1817.1 *2*	3/2(-)	> 0.7 ps	1579.8 *3*		(E2)			
2275.9 *2*	1/2+	> 1.2 fs	135.5 *2*	23				
2275.9 *2*	1/2+	> 1.2 fs	451.3 *2*	18				
2275.9 *2*	1/2+	> 1.2 fs	2275.9 *2*	3				
2275.9 *2*	1/2+	> 1.2 fs	316.8 *6*	28 *4*	(E1)			

2275.9 *2*	1/2+	> 1.2 fs	458.8 *2*	100 *4*	(E1)			
2701.6 *5*	3/2-	> 0.5 ps	742.5 *5*	75 *9*	M1+E2			
2701.6 *5*	3/2-	> 0.5 ps	391.6 *5*	100 *9*	M1+E2			
2701.6 *5*	3/2-	> 0.5 ps	884.5 *5*	50				
2701.6 *5*	3/2-	> 0.5 ps	561.2 *5*	11				
2701.6 *5*	3/2-	> 0.5 ps	877.0 *5*	18				
2701.6 *5*	3/2-	> 0.5 ps	425.7 *5*	11				
2701.6 *5*	3/2-	> 0.5 ps	1562					
9471.3 *9*	25/2-,27/2	> 0.69 ps	1579.9 *6*	6.1 *20*	D			
9471.3 *9*	25/2-,27/2	> 0.69 ps	1386.1 *5*	25 *4*	Q			
9471.3 *9*	25/2-,27/2	> 0.69 ps	2294.7 *10*	100 *6*	D			
377.749 *5*	2+	21.1 m *2*	377.748 *5*	100	[E4]			0.(
4679.5 *5*	9-	> 0.78 ps	788	12.2 *3*	D+Q	-50 *68*		
4679.5 *5*	9-	> 0.78 ps	4679	10.0 *4*				
4679.5 *5*	9-	> 0.78 ps	1772	5.7 *3*				
4679.5 *5*	9-	> 0.78 ps	3809	1.67 *22*				
4679.5 *5*	9-	> 0.78 ps	1077	100 *6*				
4679.5 *5*	9-	> 0.78 ps	2394	9.2 *6*				
3007.13 *18*	(5/2)+	> 0.84 ps	3007.3	28				
3007.13 *18*	(5/2)+	> 0.84 ps	2629.3	72				
3007.13 *18*	(5/2)+	> 0.84 ps	1717.5	100	D+Q	-0.7 *-7+4*		
1460.6 *6*	(4+,5+)	> 0.28 ps	387.5 *5*	100				
2109.8 *4*	1+	> 416 fs	718.7 *4*	100 *6*				
2109.8 *4*	1+	> 416 fs	2054.9 *4*	56 *6*				
2579.90 *16*		> 0.7 ps	966.37 *28*	15 *7*				
2579.90 *16*		> 0.7 ps	1343.15 *21*	72 *17*				
2579.90 *16*		> 0.7 ps	306.65 *28*	100 *22*				
2579.90 *16*		> 0.7 ps	1095.63 *58*	30 *15*				
1227.5 *11*	-	> 0.35 ps	152.35 *16*	9 *1*				
1227.5 *11*	-	> 0.35 ps	1144.29 *17*	100 *1*				
71.77 *5*	4+	65.4 s *5*	71.78 *5*	100	M3			14.(
271.80 *10*	4+	1.77 s *2*	271.9 *1*	100	M3			0.(
6958.0 *4*	12+	45.9 s *6*	597.1 *3*	100 *33*	E4			0.(
6958.0 *4*	12+	45.9 s *6*	465.0 *3*	75 *25*	E4			0.(
3040.4 *3*	19/2-	2.54 m *2*	3040.6 *5*	0.06 *1*	[E6]			
3040.4 *3*	19/2-	2.54 m *2*	1712.6 *3*	1.3 *1*	[M5]			
3040.4 *3*	19/2-	2.54 m *2*	701.1 *1*	100	[E4]			
2561.3 *4*	0+	≥ 1.4 ps	2561.3		E0			
2561.3 *4*	0+	≥ 1.4 ps	1153.1 *3*	100	E2			
3294.8 *4*	4+	≥ 2.1 ps	1887 *1*	19 *5*	(E2)			
3294.8 *4*	4+	≥ 2.1 ps	756.6 *3*	100 *5*	M1+E2	0.15 *5*		
4030.9 *5*	5+	≥ 0.7 ps	736.4 *4*	100 *7*	(M1+E2)	+0.14 *+10-7*		
4030.9 *5*	5+	≥ 0.7 ps	1494 *1*	20 *4*	M1+E2	-1.2 *+12-3*		5
3072.0 *4*	11/2-	> 0.7 ps	532.3 *2*	100	M1+E2	+0.25 *+5-6*		
3072.0 *4*	11/2-	> 0.7 ps	259.2 *5*	20	M1(+E2)	-0.03 *+6-3*		
3456.9 *5*	13/2-	> 0.6 ps	917.8 *4*	100	M1(+E2)	0.00 *4*		
5476.8 *23*		> 0.7 ps	1816.0 *20*	100				
2220.2	(7/2-)	> 0.3 ps	2205.8	100				
2220.2	(7/2-)	> 0.3 ps	2083.8	94	(M1+E2)			
2220.2	(7/2-)	> 0.3 ps	1853.3	10				
2455.55 *15*	9/2+	> 1.4 ps	1448.52 *20*	100	(E1+M2)	0.00 *4*		
2257.95 *21*	0+	> 2.5 ps	1447.31 *25*	100	[E2]			
3558.88 *23*	(15/2+)	> 0.4 ps	1246.7 *1*	100				
3958.20 *18*	6(-)	> 0.4 ps	437.9 *3*	100 *3*				
3958.20 *18*	6(-)	> 0.4 ps	1843 *5*	1.3 *7*				
3958.20 *18*	6(-)	> 0.4 ps	375.9 *1*	27 *1*				
3958.20 *18*	6(-)	> 0.4 ps	441.9 *1*	47 *2*				
4296.49 *18*	7(-)	> 0.4 ps	780.6 *10*	99 *4*				
4296.49 *18*	7(-)	> 0.4 ps	338.2 *1*	100 *4*				
4296.49 *18*	7(-)	> 0.4 ps	714.4 *1*	53 *2*				

4296.49 *18*	7(-)	> 0.4 ps	364.5 *1*	37 *1*				
402 *5*	(9/2+)	1.12 s *15*	5 *Calc.*		[M2]			
3942.09 *11*	1/2-,3/2-	> 120 fs	1003.0 *4*	9 *4*				
3942.09 *11*	1/2-,3/2-	> 120 fs	1776.1 *3*	22 *4*				
3942.09 *11*	1/2-,3/2-	> 120 fs	1376.2 *3*	100 *6*				
829.61 *5*	4+	> 1.7 ps	253.05 *11*	2.0 *3*				
829.61 *5*	4+	> 1.7 ps	829.60 *8*	34 *2*	M1+E2	-0.43 *28*		
829.61 *5*	4+	> 1.7 ps	671.18 *8*	100 *2*	M1+E2	-0.09 *12*		
2282.63 *12*	7+	> 1.25 ps	1706.1 *1*	100	E2			
24.95 *6*	5+	9.10 h *9*	24.889 *21*	100	M3			2.5
1044.26 *10*	(3+)	> 1.2 ps	670.1 *5*					
1044.26 *10*	(3+)	> 1.2 ps	1044.18 *14*	100 *5*				
1044.26 *10*	(3+)	> 1.2 ps	932.5 *2*	22 *3*				
2153.62 *20*		≥ 14 fs	694.02 *14*	100	D(+Q)			
2204.78 *19*	5/2(-)	≥ 0.69 ps	913.05 *20*	72 *9*	D+Q	+0.25 *10*		
2204.78 *19*	5/2(-)	≥ 0.69 ps	2203.51 *22*	19 *11*				
2204.78 *19*	5/2(-)	≥ 0.69 ps	770.5	26 *6*				
2204.78 *19*	5/2(-)	≥ 0.69 ps	1014.3	61 *13*				
2204.78 *19*	5/2(-)	≥ 0.69 ps	722.77 *7*	100 *9*				
58.59 *1*	2+	10.467 m *6*	58.603 *7*	100	M3+(E4)	<0.02		47.1
995.05 *13*	3/2-	> 10 ps	994.8 *2*	100				
642	(8-)	> 100 μs	252					
3923.6 *13*	4+	> 0.7 ps	1224.5 *2*	100 *5*	E2			
3269.1 *8*	(2)	> 57 fs	3269.1 *8*					
3273.7 *7*	(2)	> 50 fs	3273.7 *7*					
3450.9 *5*		> 11 fs	3450.9 *5*					
3943.6 *12*		> 24 fs	3943.6 *12*					
5359.3 *16*	(2)	> 29 fs	5359.3 *16*					
5452.2 *4*	1	> 13 fs	5452.2 *4*					
5528.0 *4*	(1)	> 7 fs	5528.0 *4*					
2284.80 *4*	0+	> 1.5 ps	2284.87		E0			
2284.80 *4*	0+	> 1.5 ps	952.4 *2*	100				
3871.050 *22*	2+	> 3.0 ps	677.17 *5*	16.7 *4*				
3871.050 *22*	2+	> 3.0 ps	2538.53 *4*	55 *1*				
3871.050 *22*	2+	> 3.0 ps	751.9 *4*	3.2 *7*				
3871.050 *22*	2+	> 3.0 ps	1712.30 *9*	91 *2*				
3871.050 *22*	2+	> 3.0 ps	747.33 *3*	100 *2*				
3871.050 *22*	2+	> 3.0 ps	3870.94 *7*	43.5 *15*				
3871.050 *22*	2+	> 3.0 ps	1244.93 *22*	2.6 *5*				
4077.99 *5*	1+,2+	> 12 fs	1919.28 *7*	55 *3*				
4077.99 *5*	1+,2+	> 12 fs	4077.6 *9*	9 *2*				
4077.99 *5*	1+,2+	> 12 fs	1451.88 *16*	14 *2*				
4077.99 *5*	1+,2+	> 12 fs	2745.47 *6*	100 *3*				
2129.0 *3*	11/2-	> 2 ps	1113.8 *3*	100	E2			
3426.34 *20*	13/2-	> 0.7 ps	1438.52 *14*	100 *4*	E2			
3426.34 *20*	13/2-	> 0.7 ps	1297.5 *5*	14.5 *15*	M1+E2	-2.6 *4*		
3426.34 *20*	13/2-	> 0.7 ps	1618.7 *4*	35 *5*	E2			
4019.36 *21*	15/2+	> 1.4 ps	593.00 *13*	100 *4*	E1			
4019.36 *21*	15/2+	> 1.4 ps	584.0 *2*	39 *4*	M1+E2	+0.63 *10*		
4019.36 *21*	15/2+	> 1.4 ps	720.5 *6*	127 *12*	Q			
2890.63 *20*	0+	> 3.1 ps	1717.5 *3*	100	E2			
4011.0 *15*		> 0.90 ps	2837.9 *15*	100				
3748.99 *6*	2+	> 0.5 ps	2403.25 *7*	100 *9*	E2+M1	+1.23 *10*		
3748.99 *6*	2+	> 0.5 ps	1473	20				
3748.99 *6*	2+	> 0.5 ps	3748.77 *8*	29.6 *15*				
1427.85 *25*	2+	> 0.66 ps	984.2	8.5 *41*	(M1+E2)	-0.8 *+2-15*		
1427.85 *25*	2+	> 0.66 ps	1427.8 *3*	100	[M1+E2]			
1427.85 *25*	2+	> 0.66 ps	376.6	3.4 *19*				
1427.85 *25*	2+	> 0.66 ps	1225.1	1.7 *5*	[E2]			
1549.5 *3*	(4+)	> 0.34 ps	1105.8 *3*	100	(M1+E2)	-0.77 *5*		

1647.41 *18*	(3+)	> 0.90 ps	1647.4 *2*	100 *8*	(E2(+M3))	-0.06 *+16-27*	
1647.41 *18*	(3+)	> 0.90 ps	596	<5			
1647.41 *18*	(3+)	> 0.90 ps	1445	<19			
1647.41 *18*	(3+)	> 0.90 ps	220	<4.3			
1647.41 *18*	(3+)	> 0.90 ps	1203.5	27 *8*	(M1+E2)	+0.53 *13*	
914.2 *4*	5/2-	> 1.1 ps	913.90 *12*	100 *3*	M1+E2	-0.21 *2*	2.7
914.2 *4*	5/2-	> 1.1 ps	422.6 *2*	0.7 *2*			
1732.58 *5*	7/2-	> 1.4 ps	762.5 *1*	19.8 *16*	M1+E2	+0.50 *4*	
1732.58 *5*	7/2-	> 1.4 ps	422.0 *2*	44.4 *26*	M1(+E2)	+0.08 *7*	
1732.58 *5*	7/2-	> 1.4 ps	1732.54 *7*	100 *3*	E2		
1732.58 *5*	7/2-	> 1.4 ps	338.6 *2*	9.9 *8*	M1+E2	-1.2 *+9-5*	
2627.12 *9*	11/2-	> 350 fs	331.6 *4*	2.7 *3*			
2627.12 *9*	11/2-	> 350 fs	290.4 *2*	1.7 *1*			
2627.12 *9*	11/2-	> 350 fs	1316.8 *1*	100 *3*	E2		
2720.34 *9*	9/2+	> 2.8 ps	987.6 *2*	68 *9*	E1		
2720.34 *9*	9/2+	> 2.8 ps	109.5 *2*	8.3 *13*			
2720.34 *9*	9/2+	> 2.8 ps	777.2 *3*	2.5 *7*			
2720.34 *9*	9/2+	> 2.8 ps	1409.1 *3*	100 *3*	E1		
2720.34 *9*	9/2+	> 2.8 ps	320.9 *2*	2.2 *5*			
426.18 *6*	3+	> 0.16 ps	385.28 *7*	100	(M1+E2)	-0.12 *2*	0.(
548.31 *5*	1+	> 0.17 ps	260.43 *7*	8.8 *5*	M1		0.(
548.31 *5*	1+	> 0.17 ps	507.60 *10*	97 *5*	M1		
548.31 *5*	1+	> 0.17 ps	304.88 *9*	1.9 *1*	[M1]		0.(
548.31 *5*	1+	> 0.17 ps	548.35 *11*	100 *5*	M1		
2716.47 *9*	3/2-,5/2-	> 0.2 ps	2046.4 *8*	9 *3*			
2716.47 *9*	3/2-,5/2-	> 0.2 ps	1169.6 *3*	18 *4*			
2716.47 *9*	3/2-,5/2-	> 0.2 ps	1754.9 *5*	10 *2*			
2716.47 *9*	3/2-,5/2-	> 0.2 ps	624.3 *3*	33 *8*			
2716.47 *9*	3/2-,5/2-	> 0.2 ps	2716.9 *4*	31 *4*			
2716.47 *9*	3/2-,5/2-	> 0.2 ps	1389.66 *8*	100 *13*			
2808.10 *8*	3/2-	> 0.18 ps	2808.1 *1*	100 *32*			
2808.10 *8*	3/2-	> 0.18 ps	1261.0 *2*				
2808.10 *8*	3/2-	> 0.18 ps	2138.3 *2*	32			
2808.10 *8*	3/2-	> 0.18 ps	1481.0 *2*	47 *15*			
5413.0 *3*	(17/2+)	> 2 ps	836.3 *2*	100	D(+Q)	-0.25 *+10-30*	
2094.34 *14*	(7/2)-	> 1 ps	612.7 *8*	24.7 *20*			
2094.34 *14*	(7/2)-	> 1 ps	2094.3 *2*	54 *2*			
2094.34 *14*	(7/2)-	> 1 ps	471.0 *3*	9.4 *14*			
2094.34 *14*	(7/2)-	> 1 ps	978.8 *3*	100 *3*			
2278.5 *9*	(7/2)-	> 0.84 fs	2279 *3*	2.3 *8*			
2278.5 *9*	(7/2)-	> 0.84 fs	1162.6 *11*	100 *4*			
721.26 *8*	6-	3.75 m *5*	110.74 *6*	100 *3*	E3		3.(
721.26 *8*	6-	3.75 m *5*	637.14 *6*	64.4 *18*	M4		0.(
101.1 *3*	3-	33 s *2*	101.1 *3*	100	[M3]		5.1
242.6 *5*	1+	6.6 s *2*	141.3	100	[M2]		0.1
5131.0 *4*	(6-)	> 0.7 ps	1087.8 *3*	100	(M1+E2)	-4.7 *26*	
637.07 *6*	3/2-	> 0.53 ps	389.26 *9*	4.2 *4*	M1+E2	-0.05 *+3-4*	0.(
637.07 *6*	3/2-	> 0.53 ps	637.04 *7*	100.0 *4*	M1+E2	+0.04 *2*	
650.10 *4*	5/2-	> 0.28 ps	650.14 *6*	100 *1*	M1+E2	-0.57 *3*	
650.10 *4*	5/2-	> 0.28 ps	457.19 *6*	16 *1*	M1+E2	-0.08 *+1-2*	0.(
1023.22 *5*	3/2-	> 3.5 ps	775.43 *8*	71 *4*	(M1+E2)	-0.91 *+24-6*	
1023.22 *5*	3/2-	> 3.5 ps	396.10 *10*	17 *1*	(M1+E2)	+0.57 *+6-3*	
1023.22 *5*	3/2-	> 3.5 ps	1023.22 *8*	70 *3*	(M1+E2)	+1.9 *2*	
1023.22 *5*	3/2-	> 3.5 ps	373.06 *8*	100 *5*	(M1+E2)	-0.82 *+4-5*	
1063.34 *7*	7/2-	> 0.29 ps	413.2 *1*	28 *2*	D+Q		
1063.34 *7*	7/2-	> 0.29 ps	1063.2 *2*	100 *2*	E2(+M3)	0.00 *3*	
1063.34 *7*	7/2-	> 0.29 ps	870.25 *10*	24 *1*	D+Q		
1065.28 *12*	1/2-	> 0.22 ps	415.2 *2*	4.2 *4*			
1065.28 *12*	1/2-	> 0.22 ps	1065.2 *2*	100.0 *7*			
1065.28 *12*	1/2-	> 0.22 ps	872.4 *2*	5.3 *4*			

1206.38 *7*	7/2-	> 0.42 ps	556.3 *2*	4.3 *4*	D+Q	-1.24 *9*	
1206.38 *7*	7/2-	> 0.42 ps	1206.34 *11*	100 *4*	E2(+M3)	-0.03 *2*	
1206.38 *7*	7/2-	> 0.42 ps	1013.45 *10*	92 *4*	M1+E2	+4.7 *+1-7*	
1284.26 *6*	5/2-	> 0.40 ps	1091.40 *8*	100 *3*	D+Q		
1284.26 *6*	5/2-	> 0.40 ps	1036.34 *8*	48 *2*	E2(+M3)	-0.01 *1*	
1284.26 *6*	5/2-	> 0.40 ps	1284.21 *15*	11 *1*	M1+E2	-0.7 *2*	
1284.26 *6*	5/2-	> 0.40 ps	634.5 *5*	13 *1*			
1909.26 *14*	1/2,3/2-	> 0.28 ps	1716.3 *2*	32 *2*	D+Q		
1909.26 *14*	1/2,3/2-	> 0.28 ps	1272.3 *2*	9.7 *7*	D+Q		
1909.26 *14*	1/2,3/2-	> 0.28 ps	1909.0 *3*	100 *2*	D+Q		
2050.42 *19*	9/2-	> 0.31 ps	844.1 *4*	64 *5*			
2050.42 *19*	9/2-	> 0.31 ps	987.1 *2*	100 *5*	D+Q		
2233.30 *23*	11/2-	> 1.4 ps	796.6 *3*	48 *5*			
2233.30 *23*	11/2-	> 1.4 ps	570.2 *5*	90 *3*	E2(+M3)	-0.03 *3*	
2233.30 *23*	11/2-	> 1.4 ps	1169.6 *4*	100 *5*			
2288.31 *17*	7/2-	> 0.21 ps	1638.2 *2*	100 *3*	D+Q		
2288.31 *17*	7/2-	> 0.21 ps	1081.9 *3*	47 *3*			
2377.86 *24*	9/2+	> 1.39 ps	674.9 *2*	100	(M1+E2)	-2.5 *+5-12*	
2911.9 *5*	9/2	> 1.4 ps	1705.5 *5*	100	D+Q	-1.7 *1*	
3552.3 *3*	4+	> 1.0 ps	3551 *1*	42 *15*			
3552.3 *3*	4+	> 1.0 ps	2559.7 *4*	85 *6*	[E2]		
3552.3 *3*	4+	> 1.0 ps	1246.7 *4*	100 *6*	M1+E2	-0.16 *10*	
3853.27 *21*	5+	> 2 ps	1547	0.5 *5*	[M1+E2]		
3853.27 *21*	5+	> 2 ps	1116.7 *2*	100.0 *5*	M1+E2	-1.00 *15*	
2053.8 *3*	13/2+	> 1.4 ps	988.2 *3*	100	E2(+M3)	+0.01 *2*	
2135.2 *8*	9/2+	> 1.4 ps	1069 *1*				
2135.2 *8*	9/2+	> 1.4 ps	766 *1*				
2135.2 *8*	9/2+	> 1.4 ps	1271 *1*		E1+M2	-0.06 *1*	
3784.9 *6*	(17/2)+	≥ 0.28 ps	858.7 *1*	54 *8*			
3784.9 *6*	(17/2)+	≥ 0.28 ps	557.6 *3*	62 *10*			
3784.9 *6*	(17/2)+	≥ 0.28 ps	1732.7	100 *12*	E2+M3	-0.13 *25*	
2372.353 *4*	0+	> 0.21 ps	1333.112 *5*	100.0 *4*	E2		0.(
2372.353 *4*	0+	> 0.21 ps	499.590 *6*	0.41 *10*	E2		0.(
2372.353 *4*	0+	> 0.21 ps	2372.375		E0		
2765.56 *7*	4+	> 7 ps	314.6 *1*	36 *2*			
2765.56 *7*	4+	> 7 ps	1726.4 *2*	87 *3*	E2		0.(
2765.56 *7*	4+	> 7 ps	892.7 *1*	100 *3*	E2		0.(
5207.3 *5*	(8+)	> 6 ps	954.2 *5*	82 *16*	(E1)		0.(
5207.3 *5*	(8+)	> 6 ps	1025.8 *5*	100 *11*	(E2)		0.(
393.531 *7*	3/2-	> 2.4 ps	300.219 *10*	100 *2*	M1+E2	-0.18 *1*	
393.531 *7*	3/2-	> 2.4 ps	208.951 *10*	14.0 *4*	M1+E2	-0.034 *21*	0.(
393.531 *7*	3/2-	> 2.4 ps	393.529 *10*	28.0 *1*	M1+E2	0.043 *10*	
1807.89 *14*	9/2+	> 0.7 ps	1808.5 *3*	51			
1807.89 *14*	9/2+	> 0.7 ps	828.0 *2*	24			
1807.89 *14*	9/2+	> 0.7 ps	1203.5 *2*	100	M1+E2	+3 *+2-1*	
1807.89 *14*	9/2+	> 0.7 ps	992.8 *5*	22			
438.636 *18*	9/2+	13.756 h *18*	438.634 *18*	100.0	M4		0.(
155.62 *6*	9/2+	4.140 h *15*	155.62 *6*		[M4]		6.(
468.4 *8*	5/2-	≥ 20 ps	468.4 *8*	100	[E2]		0.(
772.440 *15*	1/2-	1.05 s *10*	772.43 *2*	100	[E3]		0.(
1975.2 *11*		> 0.09 ps	1976.6 *16*	100			
2141.85 *8*	3/2-	≥ 0.25 ps	1782.67 *15*	39 *3*			
2141.85 *8*	3/2-	≥ 0.25 ps	2141.85 *20*	28.2 *22*			
2141.85 *8*	3/2-	≥ 0.25 ps	1313.8 *2*	31.9 *29*			
2141.85 *8*	3/2-	≥ 0.25 ps	1974.82 *16*	100 *7*	(M1+E2)	≥+0.5	
2141.85 *8*	3/2-	≥ 0.25 ps	1230.90 *15*	45 *4*			
2374.2 *3*	3/2+,7/2+	> 0.69 ps	1463.3 *3*	100			
2457.3 *10*	11/2-	> 1.04 ps	1255 *1*	100			
2653.4 *9*	11/2-	> 1.04 ps	1131.8 *9*		M1+E2	-3.7 *1*	
2653.4 *9*	11/2-	> 1.04 ps	1451.3 *4*				

3191.1 *9*	11/2+	> 1.04 ps	1117.3 *9*	100 *9*	M1+E2	-1.60 *7*	
3191.1 *9*	11/2+	> 1.04 ps	328.4 *4*	9 *9*			
3525.3 *4*	9/2+,13/2+	> 1.04 ps	1451 *2*				
3525.3 *4*	9/2+,13/2+	> 1.04 ps	493.5 *4*				
3628.6 *7*	13/2+,17/2+	> 0.48 ps	596.8 *7*	100			
1525.76 *4*	3/2-	≥ 0.55 ps	951.54 *9*	10 *4*	(M1(+E2))	+0.3 *3*	3.1
1525.76 *4*	3/2-	≥ 0.55 ps	1525.83 *7*	68 *6*	(M1+E2)	-0.38 *7*	2.(
1525.76 *4*	3/2-	≥ 0.55 ps	418.51 *6*	18.4 *18*	(M1(+E2))	+0.05 *7*	0.(
1525.76 *4*	3/2-	≥ 0.55 ps	1207.21 *6*	100 *7*	(M1+E2)	+0.14 *2*	1.9
1924.25 *4*	7/2-	≥ 0.62 ps	1349.99 *5*	76 *8*	(M1+E2)	-2.6 *4*	2.(
1924.25 *4*	7/2-	≥ 0.62 ps	587.64 *8*	69 *7*	(M1(+E2))	0.00 *7*	8.(
1924.25 *4*	7/2-	≥ 0.62 ps	1052.10 *4*	100 *8*	(E2)		2.8
1924.25 *4*	7/2-	≥ 0.62 ps	1923.8 *2*	35 *3*			
1924.25 *4*	7/2-	≥ 0.62 ps	816.9 *10*	8.4 *8*			
1972.37 *5*	9/2(+)	≥ 2.8 ps	484.29 *7*	24 *3*	(E1(+M2))	+0.00 *2*	6.9
1972.37 *5*	9/2(+)	≥ 2.8 ps	1397.94 *14*	7.1 *17*	(M2(+E3))	-0.06 *12*	3.(
1972.37 *5*	9/2(+)	≥ 2.8 ps	635.71 *5*	100 *7*	(E1(+M2))	-0.01 *2*	3.(
2219.29 *19*		≥ 0.21 ps	1900.59 *20*	100			
2219.29 *19*		≥ 0.21 ps	2218.9 *6*	41			
2353.30 *24*	5/2	≥ 0.17 ps	1481.4 *5*	87	D(+Q)	-0.19 *20*	
2353.30 *24*	5/2	≥ 0.17 ps	2353.0 *5*	100	D(+Q)	-0.04 *30*	
2353.30 *24*	5/2	≥ 0.17 ps	1246.6 *4*	68	D(+Q)	+0.17 *30*	
2353.30 *24*	5/2	≥ 0.17 ps	1778.5 *5*	68			
2428.68 *21*	5/2-,7/2-	≥ 1.7 ps	1321.64 *20*	100	(M1+E2)		1.9
2668.28 *6*	11/2	≥ 1.7 ps	1331.63 *6*	100			
2668.28 *6*	11/2	≥ 1.7 ps	1180.04 *10*	46			
2717.99 *5*	13/2(+)	≥ 1.4 ps	745.61 *2*	100	(E2(+M3))	-0.01 *3*	6.7
4528.10 *14*	(17/2,19/2)	≥ 2.8 ps	449.9 *1*	100			
1203.83 *20*	2+	> 220 fs	1203.8 *2*	100	M1+E2	-0.10 *7*	1.9
1244.61 *10*	2	> 500 fs	1244.6 *1*	100	D+Q	-0.05 *4*	
1476.004 *8*	5/2-	> 0.6 ps	988.638 *11*	100.0 *7*	(M1+E2)	+0.17 *5*	
1476.004 *8*	5/2-	> 0.6 ps	368.499 *22*	5.82 *28*	[M1,E2]		0.(
1476.004 *8*	5/2-	> 0.6 ps	1475.969 *14*	46.6 *7*	(M1+E2)		
1476.004 *8*	5/2-	> 0.6 ps	964.670 *10*	39 *7*	[M1,E2]		
1476.004 *8*	5/2-	> 0.6 ps	1085.3		[E2]		
1476.004 *8*	5/2-	> 0.6 ps	565.852 *12*	17.53 *21*	[M1,E2]		0.(
1699.21 *8*	1/2+	> 0.25 ps	1188.2 *2*	72 *11*	[E1]		
1699.21 *8*	1/2+	> 0.25 ps	1699.16 *8*	100 *11*	[E1]		
59.571 *14*	(0+)	9.5 s *10*	3.2 *2*		[M2]		2.9
59.571 *14*	(0+)	9.5 s *10*	59.7		[E3]		71 (
3736.80 *12*	5+	> 2 ps	1011.1 *3*	100 *7*	M1		0.(
3736.80 *12*	5+	> 2 ps	1563.5 *1*	41 *4*	M1+E2		0.(
3736.80 *12*	5+	> 2 ps	714.4 *2*	53 *4*	(M1)		0.(
3736.80 *12*	5+	> 2 ps	1241.5 *2*	9 *4*	E2		0.(
6502.11 *16*	10+	> 1.4 ps	969.8 *2*	100.0 *16*	E2		0.(
6502.11 *16*	10+	> 1.4 ps	1143.7 *2*	81.2 *16*	E2		0.(
6502.11 *16*	10+	> 1.4 ps	1009.8 *2*	27.9 *16*	E1+M2	-0.05 *3*	0.(
4999		> 0.35 ps	1303.0	100			
1613.29 *8*	7/2-	> 0.69 ps	1239.2 *3*	12 *6*			
1613.29 *8*	7/2-	> 0.69 ps	1613.2 *1*	80 *2*	M1+E2	-1.97 *6*	2.9
1613.29 *8*	7/2-	> 0.69 ps	680.4 *4*	13 *1*	M1+E2	+0.04 *3*	7.(
1613.29 *8*	7/2-	> 0.69 ps	1380.8 *3*	100 *2*	E2		2.2
1920.28 *7*	9/2-	> 1.04 ps	441.3 *3*	13 *9*			
1920.28 *7*	9/2-	> 1.04 ps	1058.2 *3*	100 *2*	M1+E2	-1.66 *4*	3.(
1920.28 *7*	9/2-	> 1.04 ps	724.5 *2*	18 *4*	E2		8.(
1920.28 *7*	9/2-	> 1.04 ps	1920.4 *1*	73 *1*	E2		3.(
4851.9 *4*	(8-)	> 3 ps	896.8 *4*	100	(M1+E2)	0.4 *2*	3.9
708.196 *7*	3/2-	> 10.7 ps	533.2 *1*	4.7 *9*	[M1,E2]		0.(
708.196 *7*	3/2-	> 10.7 ps	708.193 *8*	100.0 *21*	M1+E2		
1026.561 *10*	5/2-	> 1.2 ps	279.379 *7*	21.6 *10*	(M1+E2)		0.(

1026.561 *10*	5/2-	> 1.2 ps	1026.510 *17*	35.7 *12*	(E2)			
1026.561 *10*	5/2-	> 1.2 ps	526.642 *4*	100.0 *22*	(M1+E2)	-0.16 *3*		1.2
1026.561 *10*	5/2-	> 1.2 ps	195.22 *15*	1.0 *5*	[M1,E2]			0.(
1026.561 *10*	5/2-	> 1.2 ps	851.63 *7*	23.1 *11*	(M1+E2)	+0.8 *7*		
1026.561 *10*	5/2-	> 1.2 ps	501.5 *6*					
1026.561 *10*	5/2-	> 1.2 ps	828.0 *1*	0.4 *2*	[M2]			1.1
1212.511 *8*	5/2-	> 1.2 ps	622.71 *4*	4.04 *25*	[E1]			
1212.511 *8*	5/2-	> 1.2 ps	1037.530 *15*	62.5 *15*	(M1+E2)			
1212.511 *8*	5/2-	> 1.2 ps	504.27 *5*	47 *14*	(M1+E2)			0.(
1212.511 *8*	5/2-	> 1.2 ps	712.598 *5*	100 *3*	(M1+E2)			
1212.511 *8*	5/2-	> 1.2 ps	465.228 *10*	28.4 *8*	(M1+E2)			0.(
1212.511 *8*	5/2-	> 1.2 ps	1212.500 *23*	84.3 *23*	(E2)			
2064.93 *3*	3+	≥ 2 ps	600.94 *3*	100.0 *15*	M1+E2	≈+4.0		0.(
2064.93 *3*	3+	≥ 2 ps	336.63 *4*	1.93 *5*				
2064.93 *3*	3+	≥ 2 ps	1230.83 *4*	26.2 *6*	D+Q	-2.0 *+15-25*		
3667.26 *23*	6+	> 2.1 ps	538.4 *2*	100	(E1)			0.(
3784.18 *17*	7-	≥ 2.8 ps	655.4 *2*	100	E2			0.(
3784.18 *17*	7-	≥ 2.8 ps	1011.9 *2*	100				
139.69 *3*	7/2+	47.7 s *5*	77.86 *15*	0.008 *4*				
139.69 *3*	7/2+	47.7 s *5*	139.68 *3*	100	E3			1.5
159.71 *6*	1/2-	53.7 s *6*	159.66 *10*	100	(E3)			0.8
185.95 *4*	(7/2+)	39.0 s *10*	186.02 *7*	100	[E3]			0.4
1394.69 *12*	(9/2)-	> 1.4 ps	1394.7 *2*	100 *13*	E2			
1394.69 *12*	(9/2)-	> 1.4 ps	470.1 *3*	9.4 *16*				
2469.92 *12*	(13/2-)	> 1.4 ps	671.7 *2*	37 *8*	(E2)			1.(
2469.92 *12*	(13/2-)	> 1.4 ps	1075.2 *1*	100 *13*	(E2)			
2469.92 *12*	(13/2-)	> 1.4 ps	756.1 *2*					
2820.1 *3*	(13/2-)	> 1.4 ps	758.1 *4*	28 *6*	(E2)			
2820.1 *3*	(13/2-)	> 1.4 ps	403.5 *2*	100 *17*	(M1)			0.(
2920.91 *15*	(15/2-)	> 1.4 ps	451.1 *2*	90 *17*	(M1)			1.9
2920.91 *15*	(15/2-)	> 1.4 ps	1206.4 *4*	133 *34*	(E1)			
2920.91 *15*	(15/2-)	> 1.4 ps	810.1 *2*	100 *21*	(E2)			
5822.9 *4*	(23/2-)	> 1.4 ps	1059.1 *2*	100	(M1+E2)			
25.71 *4*	3/2-	39.8 m *17*	25.71 *4*	100	E3		*90*	
161.9223 *10*	7/2+	17.36 s *5*	161.9224 *11*	100	E3			0.8
1230.629 *5*	(5/2)-	> 0.21 ps	1230.5 *2*	4.2 *10*	[E2]			
1230.629 *5*	(5/2)-	> 0.21 ps	929.492 *14*	20 *3*	[E1]			
1230.629 *5*	(5/2)-	> 0.21 ps	991.627 *19*	100 *5*	E2+M1	+6.0 *4*		
1230.629 *5*	(5/2)-	> 0.21 ps	791.160 *7*	50 *4*				
1230.629 *5*	(5/2)-	> 0.21 ps	980.8 *4*	17 *3*				
1230.629 *5*	(5/2)-	> 0.21 ps	649.622 *6*	19.3 *23*				
1364.273 *4*	(3/2-)	> 0.49 ps	843.665 *21*	28 *3*				
1364.273 *4*	(3/2-)	> 0.49 ps	452.735 *5*	2.5 *3*				
1364.273 *4*	(3/2-)	> 0.49 ps	1115.24 *24*	10.7 *20*				
1364.273 *4*	(3/2-)	> 0.49 ps	684.169 *9*	12.5 *7*				
1364.273 *4*	(3/2-)	> 0.49 ps	177.289 *13*	2.8 *4*				
1364.273 *4*	(3/2-)	> 0.49 ps	1063.120 *12*	100 *10*				
1364.273 *4*	(3/2-)	> 0.49 ps	556.089 *22*	3.1 *4*				
1607.702 *8*	3/2+,5/2+	> 0.42 ps	660.75 *4*	2.49 *17*				
1607.702 *8*	3/2+,5/2+	> 0.42 ps	1306.557 *19*	100 *12*				
1607.702 *8*	3/2+,5/2+	> 0.42 ps	927.578 *12*	10.6 *13*				
1607.702 *8*	3/2+,5/2+	> 0.42 ps	783.31 *5*	1.71 *17*				
1607.702 *8*	3/2+,5/2+	> 0.42 ps	1168.32 *8*	8.0 *11*				
1607.702 *8*	3/2+,5/2+	> 0.42 ps	811.58 *4*	1.77 *14*				
1607.702 *8*	3/2+,5/2+	> 0.42 ps	696.164 *17*	2.70 *18*				
1607.702 *8*	3/2+,5/2+	> 0.42 ps	1368.72 *18*	7.1 *11*				
1607.702 *8*	3/2+,5/2+	> 0.42 ps	1026.21 *7*	5.8 *5*				
1607.702 *8*	3/2+,5/2+	> 0.42 ps	799.54 *5*	3.2 *3*				
2949.19 *16*	4-	> 1.4 ps	441.7 *2*	100 *11*	M1+E2	-0.6 *3*		
2949.19 *16*	4-	> 1.4 ps	1446.7 *5*	67	[E1]			

2949.19 *16*	4-	> 1.4 ps	1095.2 *5*	56	[E1]		
4121.2 *3*	8+	> 0.7 ps	290.5 *2*	100 *11*	M1		0.(
4121.2 *3*	8+	> 0.7 ps	1574 *1*	78 *22*	(E2)		
4121.2 *3*	8+	> 0.7 ps	536.2 *2*	56	M1+E2	-0.4 *3*	
4214.1 *4*	(8-)	> 1.4 ps	664.0 *3*	80 *10*			
4214.1 *4*	(8-)	> 1.4 ps	1200 *1*	≈100	[E2]		
4786.9 *5*	(10+)	> 1.4 ps	161.9 *2*	≈87			
4786.9 *5*	(10+)	> 1.4 ps	1202.2 *6*	<13	[E2]		
4786.9 *5*	(10+)	> 1.4 ps	955.9 *5*	100 *9*	(E2)		
5783.8 *7*	(12+)	> 0.6 ps	1158.7 *5*	100	[E2]		
95.77 *3*	1/2-	3.92 m *1*	95.73 *3*	100	E3		9.4
1312.0 *3*	(7/2-)	> 0.21 ps	784 *1*	<18	[E2]		
1312.0 *3*	(7/2-)	> 0.21 ps	1174				
1312.0 *3*	(7/2-)	> 0.21 ps	740.1 *3*	≈100			
1312.0 *3*	(7/2-)	> 0.21 ps	947 *1*	22 *2*	M1+E2	-1.6 *2*	
103.00 *6*	7/2+	57.28 m *2*	103.01 *6*	100	E3(+M4)	<0.0057	6.7
2893.66 *18*	5-	> 131.7 ps	1158.3 *8*	10 *3*			
2893.66 *18*	5-	> 131.7 ps	343.3 *1*	100 *17*			
100.76 *15*	(3-)	10.6 s *3*	101.3 *3*	100	(M2)		1.1
102.578 *28*	(4)+	1.31 s *2*	102.6	<1.1	[E3]		7.2
102.578 *28*	(4)+	1.31 s *2*	57.11 *2*	100 *3*	M2		9.5
105.86 *8*	9/2+	4.28 m *10*	105.87 *10*	100	E3		6.1
207.61 *9*	9/2+	4.85 s *4*	207.5 *1*	100	E3		0.1
85.843 *4*	5-	4.4205 h *8*	48.786 *5*	100	M3		308
45.9492 *10*	2-	6.13 m *5*	45.949 *1*	100	M3		400
3791.7 *5*		> 0.7 ps	653.9 *7*	20			
3791.7 *5*		> 0.7 ps	1814.1 *6*	100 *20*			
129.77 *5*	7/2+	50 s *3*	129.76 *10*	100	E3		2.6
3635.3 *4*	(7+)	≥ 0.7 ps	975.5 *3*	100 *14*			
3635.3 *4*	(7+)	≥ 0.7 ps	1242 *1*	≈24			
4126.23 *20*	(8-)	≥ 1.7 ps	490.5 *2*	39 *12*			
4126.23 *20*	(8-)	≥ 1.7 ps	780.4 *1*	100 *6*			
4126.23 *20*	(8-)	≥ 1.7 ps	596.0 *3*	21 *9*			
190.64 *4*	1/2-	13.10 s *3*	190.46 *16*	100	E3		0.4
2192.4 *4*	(15/2+)	> 2.1 ps	1258 *1*	≈100			
2192.4 *4*	(15/2+)	> 2.1 ps	1216.2 *4*	40 *6*	D+Q		
3595.14 *9*	(7-)	> 7 ps	98.5 *1*	28.9 *26*			
3595.14 *9*	(7-)	> 7 ps	675.5 *1*	100 *8*			
3595.14 *9*	(7-)	> 7 ps	427.5 *2*	66 *5*			
3595.14 *9*	(7-)	> 7 ps	584.0 *2*	84 *8*			
3595.14 *9*	(7-)	> 7 ps	246.5 *2*	15.0 *13*			
3595.14 *9*	(7-)	> 7 ps	767.1 *3*	16 *5*			
3595.14 *9*	(7-)	> 7 ps	557.2 *3*	5.3 *26*			
41.5575 *7*	1/2-	1.83 h *2*	32.1516 *5*	100	E3		
304.871 *20*	1/2-	4.480 h *8*	304.87 *2*	100	M4		0.5
111.19 *22*	4(-)	5.74 m *3*	64.4		(M3)		105.4
111.19 *22*	4(-)	5.74 m *3*	8.6		[E3]		4.8
86.31 *7*	9/2+	30.5 m *3*	86.26 *19*	100	E3		17.7
2656.2 *6*	(17/2-)	> 1 ps	917.6 *2*		Q		
2656.2 *6*	(17/2-)	> 1 ps	361.8				
3496.8 *10*	(21/2-)	> 1 ps	840.5		(E2)		8.1
3496.8 *10*	(21/2-)	> 1 ps	736.9		[E2]		1.1
42.0780 *20*	9/2+	> 0.3 ms	42.078 *2*	100	M2		38.7
463.59 *8*	6-	20.26 m *4*	463.62 *10*	100 *3*	E4		0.(
463.59 *8*	6-	20.26 m *4*	215.61 *10*	95 *3*	M3+E4	1.18 *4*	1.(
3054.56 *15*	(21/2-)	> 69 ps	228.0 *1*	100	M1		0.(
5419.30 *19*	(27/2+)	> 7 ps	662.2 *2*	96 *11*	(M1)		
5419.30 *19*	(27/2+)	> 7 ps	107.0 *1*	100 *11*	(M1)		0.1
5419.30 *19*	(27/2+)	> 7 ps	1283.9 *1*	96 *11*	(E2)		
556.05 *18*	6-	1.017 m *3*	556.07 *18*	100	(E4)		0.(

106.90 *3*	3-	258 s *4*	106.92 *15*	100	M3		10.7
3580.81 *25*	(7-)	> 21 ps	1817.0 *3*	100 *3*	D		
3580.81 *25*	(7-)	> 21 ps	683.1 *3*	16.9 *14*			
3602.64 *24*	(7-)	> 21 ps	1839.0 *2*	100 *4*	D		
3602.64 *24*	(7-)	> 21 ps	902.1 *3*	18.0 *20*	D+Q		
1470.5 *5*	(13/2+)	≥ 0.76 ps	361.1				
1470.5 *5*	(13/2+)	≥ 0.76 ps	674.0 *4*		(E2)		1.5
1910.2 *10*	(15/2-)	≥ 1.2 ps	855	100	(E2)		8.4
259.15 *9*	1/2-	4.95 s *12*	259.1 *1*	100	E3		0.1
238.79 *5*	1/2-	67.63 m *4*	238.78 *5*		M4		1.9
238.79 *5*	1/2-	67.63 m *4*	7.00 *6*		[E3]		2.0
767.34 *8*	5/2+	> 7 ps	767.40 *19*	100 *10*	(E2)		
767.34 *8*	5/2+	> 7 ps	535.61 *18*	95 *10*	(M1)		
1355.15 *9*	5/2+	≥ 0.13 ps	587.5 *4*	6.7 *7*	[M1+E2]		
1355.15 *9*	5/2+	≥ 0.13 ps	1123.34 *14*	100 *4*	[M1+E2]		
1355.15 *9*	5/2+	≥ 0.13 ps	611.9 *2*	61 *4*	[E1]		
1555.35 *10*	(5/2+,7/2)	≥ 0.11 ps	769.7 *10*	19 *4*			
1555.35 *10*	(5/2+,7/2)	≥ 0.11 ps	1323.4 *2*	44 *3*			
1555.35 *10*	(5/2+,7/2)	≥ 0.11 ps	787.95 *14*	100 *6*			
1555.35 *10*	(5/2+,7/2)	≥ 0.11 ps	1555.3 *3*	13.8 *11*			
3227.2 *4*	(21/2)-	> 2.8 ps	860.2 *3*	100	E2		
388.5287 *23*	1/2-	2.815 h *12*	388.5276 *23*	100	M4		0.2
2169.43 *2*	1/2+	≥ 0.15 ps	1296.00 *3*	100 *15*	(E1)		2.6
2169.43 *2*	1/2+	≥ 0.15 ps	915.56 *8*	0.98 *18*	(M2)		1.6
3992.42 *7*	(0+)	> 0.48 ps	505.9 *1*	100.0 *5*	M1		0.0
3992.42 *7*	(0+)	> 0.48 ps	2156.0 *2*	15.3 *5*	[E2]		5.0
5498.7 *11*	(1,2+)	> 0.7 ps	5498.5 *11*	100			
5583.3 *3*		> 3.3 ps	3747.1 *3*	100			
5730.18 *20*	4+	> 0.2 ps	3894.0 *2*	100	[E2]		1.1
5831.5 *5*	(1,2+)	> 1 ps	5831.3 *5*	100			
6052.2 *3*	(2+)	> 1.1 ps	6052.0 *3*	100			
6101.4 *3*	(1,2+)	> 0.8 ps	6101.2 *3*	100			
1032.00 *4*	1/2+	> 1 ps	1031.95 *5*	100	[E2]		
3388.1 *7*	15/2-	> 7 ps	1309.3 *1*	100	E2		
228.5 *1*	(1-)	4.8 s *3*	228.5 *1*	100	M3(+E4)	<0.05	0.5
1482.69 *17*	(15/2+)	> 0.7 ps	799.5 *3*	100 *4*	[E2]		1.0
1482.69 *17*	(15/2+)	> 0.7 ps	644.3 *5*	42.6 *22*	(M1)		1.6
2594.5 *6*	(17/2-)	> 0.69 ps	811.9 *4*	100	[E2]		1.0
62.04 *10*	3/2-	2.85 m *2*	62.1 *3*	100	E3		90.8
218.21 *9*	(8+)	47.4 m *4*	10.22 *8*	100	(E3)		2.2
380.82 *7*	9/2+	13.37 h *3*	380.79 *7*	100	M4		0.2
5759.59 *24*	(27/2-)	> 2.1 ps	1720.0 *3*	95 *11*	(E1+M2)	-0.14 *10*	5.2
5759.59 *24*	(27/2-)	> 2.1 ps	439.7 *5*	14 *4*	D(+Q)	+0.10 *10*	
5759.59 *24*	(27/2-)	> 2.1 ps	1195.6 *3*	100 *7*	(E2)		4.2
5759.59 *24*	(27/2-)	> 2.1 ps	264.3 *5*	12.3 *18*	(D)		
5759.59 *24*	(27/2-)	> 2.1 ps	531.5 *5*	9 *4*			
706.79 *13*	2-	> 10 ps	706.3 *5*	8 *4*	[E2]		
706.79 *13*	2-	> 10 ps	313.93 *10*	100 *6*			
908.97 *3*	9/2+	15.663 s *5*	908.960 *25*	100	M4+E5	0.00041 *4*	0.0
4825.38 *17*	17/2+	≥ 3.5 ps	693.2 *2*	100 *7*	E1		
4825.38 *17*	17/2+	≥ 3.5 ps	570.5 *3*	11 *6*			
4825.38 *17*	17/2+	≥ 3.5 ps	1931.9 *3*	14 *4*	(E2)		
682.01 *5*	7+	3.19 h *6*	681.8 *6*	0.35 *3*	E5		0.0
682.01 *5*	7+	3.19 h *6*	479.51 *5*	100.00 *3*	M4(+E5)	<0.1	0.0
555.58 *5*	9/2+	49.71 m *4*	555.57 *5*	100	M4		0.0
667.52 *23*	(9/2)+	1.17 s *3*	667.5 *5*	100	[M4]		0.0
292.2 *3*	(1/2-)	10.9 s *3*	292.2 *3*	100	[E3]		0.0
335.84 *19*	1/2-	14.0 s *2*	134.93 *15*	100	E3		2.6
9912.6 *5*	(19-)	> 0.7 ps	987.35 *20*	93 *17*	M1(+E2)	-0.11 *16*	6.9
9912.6 *5*	(19-)	> 0.7 ps	1712.50 *20*	100 *7*	E2		3.9

587.82 *10*	1/2-	4.161 m *10*	587.8 *1*	100	(M4)		0.(
1094.91 *18*	3/2-	> 0.05 ps	507.4 *7*	100	(M1)		
1451.23 *18*	5/2-	> 3.5 ps	863.3 *2*	100 *3*	(E2)		
1451.23 *18*	5/2-	> 3.5 ps	356.4 *4*	56 *3*	(M1)		
2085.9 *8*	(5/2)+	> 2 ps	458	15 *6*			
2085.9 *8*	(5/2)+	> 2 ps	991.7	100 *6*	(E1)		
3111.20 *9*	(19/2)+	> 2.8 ps	115.89 *7*	31 *10*	(M1)		0.1
3111.20 *9*	(19/2)+	> 2.8 ps	387.08 *8*	100 *7*	M1+E2	-0.11 *6*	
5381.0 *4*	(27/2)+	> 0.7 ps	1804.1 *7*	18.9 *11*	[E2]		
5381.0 *4*	(27/2)+	> 0.7 ps	643.4 *3*	100 *5*	M1		
3448.230 *14*	6+	> 1.46 ps	1129.224 *15*	100.0 *4*	E1		2.4
3448.230 *14*	6+	> 1.46 ps	371.307 *8*	1.95 *7*	E2		0.(
2170.15 *15*	(11/2)-	> 5.5 ps	38.7 *2*	2.5 *14*	[E1]		1.7
2170.15 *15*	(11/2)-	> 5.5 ps	2170.04 *18*	100 *10*	(E3)		
2066.65 *5*	2+	> 0.76 ps	2066.7 *4*	0.53 *7*	E2		
2066.65 *5*	2+	> 0.76 ps	219.07 *15*	0.64 *10*			
2066.65 *5*	2+	> 0.76 ps	1132.12 *5*	100 *3*	(M1+E2)	-3.2 *+5-4*	
2066.65 *5*	2+	> 0.76 ps	571.28 *15*	0.60 *20*			
2743.55 *7*	4-	> 2.63 ps	403.83 *9*	57 *3*	(M1(+E2))	+0.04 *2*	
2743.55 *7*	4-	> 2.63 ps	344.8 *3*	4.0 *16*			
2743.55 *7*	4-	> 2.63 ps	1248.00 *11*	100 *5*	(E1(+M2))	+0.02 *+6-4*	
2743.55 *7*	4-	> 2.63 ps	257.57 *10*	90 *5*	(M1(+E2))	-0.01 *+2-3*	0.(
3082.36 *3*	4+	> 1.4 ps	1185.19 *3*	100.0 *13*	E1(+M2)	+0.02 *3*	0.(
3082.36 *3*	4+	> 1.4 ps	224.8	10.3			
3082.36 *3*	4+	> 1.4 ps	856.6 *2*	6.3 *13*	[E2]		0.(
3082.36 *3*	4+	> 1.4 ps	1331.8 *2*	10.1 *13*			
3082.36 *3*	4+	> 1.4 ps	643.9 *2*	7.1 *8*			
3150.28 *3*	3-	> 0.54 ps	1252.98 *7*	66 *7*	M1+E2	+1.7 *3*	0.(
3150.28 *3*	3-	> 0.54 ps	711.56 *3*	100 *4*	(E1+M2)	-0.07 *4*	0.(
3243.61 *7*		> 0.097 ps	1018.3 *2*	100 *25*			
3243.61 *7*		> 0.097 ps	574.74 *6*	100 *25*			
3448.72 *8*	(2+)	> 0.66 ps	1551.50 *8*	75 *19*			
3448.72 *8*	(2+)	> 0.66 ps	780.2 *2*	100 *19*			
3749.38 *10*	4+	> 0.26 ps	1852.2 *1*	100			
69+Y	(1/2-,3/2-)	3.3 s *9*	69		(E2,M2)		
124.67 *25*	4-	18.91 s *6*	2.3 *4*		[M2,E3]		3E(
104.60 *5*	1/2-	60.86 d *22*	104.62 *5*	100	M4		167.1
1790.63 *9*	(9/2-)	> 1.6 ps	1790.53 *13*	100.0 *5*	(E1+M2)	-0.15 *15*	
1790.63 *9*	(9/2-)	> 1.6 ps	603.71 *15*	3.4 *5*			
1844.93 *13*	(5/2)-	> 1.5 ps	1740.35 *15*	100 *4*			
1844.93 *13*	(5/2)-	> 1.5 ps	657.95 *21*	54 *4*			
2120.87 *15*	(7/2-)	> 1.0 ps	2120.9 *3*	24 *4*			
2120.87 *15*	(7/2-)	> 1.0 ps	329.89 *24*	100 *4*			
2120.87 *15*	(7/2-)	> 1.0 ps	934.1 *3*	91 *4*			
2120.87 *15*	(7/2-)	> 1.0 ps	808.4 *3*	21 *4*			
30.77 *2*	1/2-	16.12 y *12*	30.77 *2*	100	M4		1.(
810.32 *9*	5/2-	> 1.0 ps	123.3 *2*	<1			
810.32 *9*	5/2-	> 1.0 ps	779.53 *22*	100	(E2)		1.1
1082.68 *5*	9/2+	> 2.8 ps	338.73 *7*	100.0 *17*	(E2+M1)	-0.09 *2*	0.(
1082.68 *5*	9/2+	> 2.8 ps	103.80 *11*	9 *3*			
1082.68 *5*	9/2+	> 2.8 ps	1082.53 *15*	35 *3*	M1+E2	>1.8	6.(
1369.86 *17*	5/2-	> 0.55 ps	683.2 *2*	30 *4*	D+Q	-0.34 *5*	
1369.86 *17*	5/2-	> 0.55 ps	559.4 *2*	100 *4*	D+Q	-0.32 *7*	
1369.86 *17*	5/2-	> 0.55 ps	1338.9	14			
1395.42 *13*	(7/2-)	> 0.55 ps	584.97 *22*	100 *4*	D+Q	-0.10 *2*	
1395.42 *13*	(7/2-)	> 0.55 ps	708.6 *2*	9 *4*	[E2]		
1588.06 *17*	3/2(-),5/2(-)	> 0.87 ps	901.2 *2*	100 *8*	(M1+E2)	-0.53 *6*	
1588.06 *17*	3/2(-),5/2(-)	> 0.87 ps	777.8 *2*	18 *8*	(M1+E2)	-4.0 *+13-35*	
2002.52 *10*	(11/2+)	> 0.55 ps	511.5 *2*	<2			
2002.52 *10*	(11/2+)	> 0.55 ps	1052.8 *2*	100 *2*	(M1+E2)	-0.63 *7*	6.5

2002.52 *10*	(11/2+)	> 0.55 ps	502.4 *2*	12 *2*	[E1]			
2002.52 *10*	(11/2+)	> 0.55 ps	1023.7 *2*	10 *2*	[E2]			
2002.52 *10*	(11/2+)	> 0.55 ps	399.1 *2*	20 *2*				
40.892 *12*	3+	6.263 m *4*	40.90 *5*	100	M3			
235.69 *2*	1/2-	3.61 d *3*	235.69 *2*	100	M4			2.7
743.35 *3*	1/2-	58.7 s *18*	743.36 *3*	100	[M4]			0.(
365.27 *8*	1/2-	2.5 m *2*	365.1	100	[M4]			0.1
653.01 *9*	1/2-	64.6 s *6*	652.9 *1*	100	M4			0.(
2282.61 *5*	4+	> 3.4 ps	773.09 *3*	100	E2			
2519.53 *21*	0+	> 3.4 ps	1010.02 *20*	100	[E2]			
3368.68 *7*	(4+)	> 3.4 ps	1085.88 *11*	23.2 *21*	(M1+E2)			
3368.68 *7*	(4+)	> 3.4 ps	305.06 *3*	100 *5*	D+Q			
3368.68 *7*	(4+)	> 3.4 ps	842.1 *2*	106 *6*				
3368.68 *7*	(4+)	> 3.4 ps	1858.5 *7*	4.8 *12*	(E2)			
3368.68 *7*	(4+)	> 3.4 ps	361.65 *11*	27.5 *21*	D+Q	-0.44 *15*		
3579.81 *6*	3-	> 0.21 ps	1297.22 *9*	87 *5*	(E1)			
3579.81 *6*	3-	> 0.21 ps	1052.88 *8*	100 *5*	(E2)			
3579.81 *6*	3-	> 0.21 ps	2070.21 *9*	≈33				
3621.06 *7*	(LE4)	> 0.21 ps	2111.53 *6*	100				
3688.77 *7*	1(-),2,3	> 0.69 ps	2179.24 *6*	100 *4*	D(+Q)			
3688.77 *7*	1(-),2,3	> 0.69 ps	838.9 *2*	15.8 *15*				
3814.58 *8*	2,3	> 0.48 ps	964.59 *11*	94 *9*	D(+Q)			
3814.58 *8*	2,3	> 0.48 ps	234.83 *13*	91 *9*				
3814.58 *8*	2,3	> 0.48 ps	807.7	36.1 *12*				
3814.58 *8*	2,3	> 0.48 ps	2305.20 *12*	100 *6*	D(+Q)			
3814.58 *8*	2,3	> 0.48 ps	750.8					
3841.87 *12*	0+	> 0.21 ps	2332.33 *11*	100	[E2]			
3963.19 *16*	4+	> 0.21 ps	1113.2 *3*	55 *6*				
3963.19 *16*	4+	> 0.21 ps	899.3 *5*	100 *8*				
3963.19 *16*	4+	> 0.21 ps	2453.77 *20*	49 *6*				
3963.19 *16*	4+	> 0.21 ps	594.9					
2424.95 *4*	21/2+	6.85 h *7*	263.049 *13*	100.0	E4			0.(
2667.95 *7*	(13/2+)	> 0.30 ps	420.85 *8*	36.5 *22*				
2667.95 *7*	(13/2+)	> 0.30 ps	506.00 *8*	100 *4*				
2755.27 *8*	(11/2-)	> 0.54 ps	451.10 *9*	100.0 *12*				
2755.27 *8*	(11/2-)	> 0.54 ps	1278.10 *10*	13.6 *7*				
3048.23 *10*	(9/2-)	> 38 fs	607.64 *9*	100.0 *12*				
3048.23 *10*	(9/2-)	> 38 fs	292.9 *2*	8.8 *12*	[M1]			0.(
3068.86 *12*	(13/2+)	> 0.125 ps	427.00 *9*	100	[M1]			
1625.905 *16*	2+	> 0.90 ps	847.689 *19*	100.0 *2*	M1+E2	-1.05 *+9-10*		0.(
1625.905 *16*	2+	> 0.90 ps	128.0 *4*	1.4 *8*				
1625.905 *16*	2+	> 0.90 ps	1625.86 *4*	9.4 *6*	E2			0.(
1978.450 *14*	3+	> 2.29 ps	480.696 *24*	30.2 *18*	M1+E2	+0.12 *4*		0.(
1978.450 *14*	3+	> 2.29 ps	108.94 *11*	0.22 *7*				
1978.450 *14*	3+	> 2.29 ps	352.56 *3*	4.74 *22*	M1+E2			0.(
1978.450 *14*	3+	> 2.29 ps	1200.227 *13*	100.0 *4*	M1+E2	+0.89 *10*		0.(
1978.450 *14*	3+	> 2.29 ps	350.06 *3*	8.2 *23*	M1+E2			0.(
2219.425 *14*	4+	> 0.38 ps	350.05 *3*	64 *10*	(M1,E2)			0.(
2219.425 *14*	4+	> 0.38 ps	593.23 *11*	41 *8*				
2219.425 *14*	4+	> 0.38 ps	241.2 *2*	71 *4*				
2219.425 *14*	4+	> 0.38 ps	1441.123 *23*	32 *4*	E2			0.(
2219.425 *14*	4+	> 0.38 ps	591.23 *5*	97 *5*	(M1,E2)			0.(
2219.425 *14*	4+	> 0.38 ps	721.632 *18*	100.0 *9*	E2			0.(
2234.63 *4*	3-	> 0.277 ps	1456.25 *9*	9.72 *22*	E1			0.(
2234.63 *4*	3-	> 0.277 ps	365.04 *11*	9.3 *4*	E1			0.(
2234.63 *4*	3-	> 0.277 ps	736.88 *7*	97.0 *13*	E1			0.(
2234.63 *4*	3-	> 0.277 ps	608.69 *7*	100.0 *13*	E1			0.(
2438.477 *15*	5+	> 0.139 ps	460.03 *13*	46.1 *4*	E2			0.(
2438.477 *15*	5+	> 0.139 ps	810.336 *24*	19.3 *5*	M1+E2			0.(
2438.477 *15*	5+	> 0.139 ps	219.080 *18*	5.14 *11*	M1+E2	-0.44 *4*		0.(

2438.477 *15*	5+	> 0.139 ps	568.869 *12*	100.0 *5*	M1+E2	-0.24 *3*	0.(
2440.76 *3*	6+	> 0.208 ps	812.56 *3*	100	E2+M3	-0.036 *8*	0.(
2481.06 *6*	(4)+	> 1.01 ps	983.1 *2*	14 *3*			
2481.06 *6*	(4)+	> 1.01 ps	852.91 *8*	100 *8*	M1+E2	-0.20 *7*	0.(
2481.06 *6*	(4)+	> 1.01 ps	1702.78 *9*	33.9 *19*	E2		0.(
2481.06 *6*	(4)+	> 1.01 ps	611.4 *2*	25 *3*			
2611.51 *10*		> 0.194 ps	983.32 *10*	1.0E+2 *4*			
2611.51 *10*		> 0.194 ps	985.7	9E+1 *4*			
2734.57 *6*	(4,5)+	> 0.25 ps	864.93 *9*	55.6 *18*			
2734.57 *6*	(4,5)+	> 0.25 ps	1109.1 *5*	13 *5*			
2734.57 *6*	(4,5)+	> 0.25 ps	293.9 *4*	1.6 *5*			
2734.57 *6*	(4,5)+	> 0.25 ps	1106.44 *8*	100 *2*			
2755.08 *3*	6+	> 0.194 ps	314.29 *4*	16.5 *14*	M1+E2	-0.11 *1*	0.(
2755.08 *3*	6+	> 0.194 ps	535.78 *8*	2.7 *3*	E2+M3	-0.10 *3*	0.(
2755.08 *3*	6+	> 0.194 ps	1126.94 *4*	100 *4*	E2+M3	-0.037 *5*	0.(
2755.08 *3*	6+	> 0.194 ps	316.43 *7*	10.7 *23*	M1+E2	-0.060 *5*	0.(
2755.08 *3*	6+	> 0.194 ps	885.4 *2*	0.7 *3*	E2+M3	-0.10 *3*	0.(
2790.21 *6*	(2,4)	> 0.68 ps	2011.96 *9*	100.0 *14*			
2790.21 *6*	(2,4)	> 0.68 ps	555.48 *9*	11.8 *14*			
2790.21 *6*	(2,4)	> 0.68 ps	1292.99				
2790.21 *6*	(2,4)	> 0.68 ps	1164.50 *14*	60 *3*			
3416.82 *6*	4+	> 0.61 ps	1919.33 *15*	100 *3*	E2		0.(
3416.82 *6*	4+	> 0.61 ps	283.0 *2*	12.5 *25*			
3416.82 *6*	4+	> 0.61 ps	1320.78 *10*	78 *4*	E2		0.(
3416.82 *6*	4+	> 0.61 ps	229.9 *6*	10 *5*			
3416.82 *6*	4+	> 0.61 ps	2638.55 *10*	81 *3*	E2		0.(
3416.82 *6*	4+	> 0.61 ps	976.2 *6*	25 *15*			
3623.19 *10*	(3+)	> 0.236 ps	2844.91 *10*	100			
391.84 *8*	1/2-	43.5 m *10*	391.83 *8*	100	M4		0.1
76 *3*	(2)+	52.0 m *10*	76 *3*				
38.91 *4*	1/2-	61 d *2*	38.9 *1*	100	M4		5.1
927.81 *3*	3/2+	≥ 589 fs	888.91 *4*	66 *4*	(E1)		0.(
927.81 *3*	3/2+	≥ 589 fs	591.42 *5*	52.8 *8*	(E2(+M3))	+0.15 *10*	0.(
927.81 *3*	3/2+	≥ 589 fs	301.00 *5*	100.0 *6*	(M1+E2)	-0.21 *3*	0.(
1084.97 *4*	(5/2)+	≥ 347 fs	748.56 *5*	100 *6*			
1084.97 *4*	(5/2)+	≥ 347 fs	458.0 *2*	3.4 *4*			
1084.97 *4*	(5/2)+	≥ 347 fs	1084.98 *7*	1.89 *21*			
1084.97 *4*	(5/2)+	≥ 347 fs	157.4 *3*	<1.05	[M1,E2]		0.1
1214.55 *4*	9/2-	≥ 624 fs	546.72 *4*	100.0 *14*	E2(+M3)	-0.16 *20*	0.(
1214.55 *4*	9/2-	≥ 624 fs	1214.47 *10*	23 *3*	D		
1214.55 *4*	9/2-	≥ 624 fs	878.35 *9*	24.7 *24*	D(+Q)		
1416.41 *5*	3/2,5/2(-)	≥ 492 fs	748.55 *5*	100 *20*			
1416.41 *5*	3/2,5/2(-)	≥ 492 fs	1377.63 *10*	16.5 *5*			
1416.41 *5*	3/2,5/2(-)	≥ 492 fs	769.86 *6*	49.7 *9*			
1958.98 *10*	(5/2-)	≥ 596 fs	1622.58 *10*	100 *3*	D(+Q)		
1958.98 *10*	(5/2-)	≥ 596 fs	1958.74 *30*	50 *9*			
2212.90 *13*	(17/2-)	≥ 1.4 ps	510.9 *3*	23 *5*	(E2)		0.(
2212.90 *13*	(17/2-)	≥ 1.4 ps	697.6 *4*	9.4 *11*	[E1]		0.(
2212.90 *13*	(17/2-)	≥ 1.4 ps	663.43 *12*	100 *5*	(E1(+M2))	+0.07 *9*	0.(
3516.0 *3*	25/2+	> 5 ps	969.0 *3*	100	E2(+M3)	-0.03 *8*	0.(
34.23 *4*	4+	51.5 m *10*	34.20 *5*	100	M3		3.7
96.57 *6*	1/2-	91.0 d *6*	96.5 *1*	100	M4		311
656.90 *6*	5/2-	≥ 0.76 ps	332.4 *3*	0.6 *1*	[E1]		0.(
656.90 *6*	5/2-	≥ 0.76 ps	560.34 *4*	100 *2*	E2		0.(
656.90 *6*	5/2-	≥ 0.76 ps	441.2	<3	[E1]		0.(
772.68 *6*	13/2+	≥ 0.35 ps	772.70 *7*	100	E2		1.5
832.80 *6*	11/2(+)	≥ 0.35 ps	832.85 *7*	100	(M1+E2)		0.(
855.45 *3*	7/2+	≥ 0.37 ps	531.16 *11*	7.6 *6*			
855.45 *3*	7/2+	≥ 0.37 ps	855.53 *14*	100 *2*	M1+E2	+0.3 *2*	1.2
855.45 *3*	7/2+	≥ 0.37 ps	639.72 *2*	17.7 *10*	(M1+E2)	-2.3 *+6-1*	0.(

861.90 *8*	(9/2+)	≥ 0.38 ps	646.78 *20*	19 *9*			
861.90 *8*	(9/2+)	≥ 0.38 ps	861.70 *10*	100 *1*	(M1+E2)	-0.51 *21*	1.2
1049.22 *7*	3/2-	≥ 0.21 ps	392.2 *1*	100 *5*	(M1)		0.(
1049.22 *7*	3/2-	≥ 0.21 ps	724.7 *1*	84 *18*	[E1]		6.8
1049.22 *7*	3/2-	≥ 0.21 ps	469.2 *1*	61 *5*	(M1)		0.(
1240.02 *7*	(7/2-)	≥ 0.26 ps	915.7 *2*	20 *6*	(E1)		4.2
1240.02 *7*	(7/2-)	≥ 0.26 ps	293.6	35			
1240.02 *7*	(7/2-)	≥ 0.26 ps	659.6 *1*	88 *4*	[E2]		0.(
1240.02 *7*	(7/2-)	≥ 0.26 ps	1024.4 *2*	29 *8*	[E1]		3.1
1240.02 *7*	(7/2-)	≥ 0.26 ps	583.16 *5*	100 *3*	(M1+E2)	-0.34 *24*	0.(
1441.1 *10*		≥ 0.21 ps	1116.6	100			
1733.3 *4*	(3/2+,5/2,7/2-)	≥ 0.54 ps	1517.6 *4*	100 *5*			
1733.3 *4*	(3/2+,5/2,7/2-)	≥ 0.54 ps	1153.0 *6*	31 *21*			
142.6836 *11*	1/2-	6.0072 h *9*	2.1726 *4*		E3		1.4
142.6836 *11*	1/2-	6.0072 h *9*	142.63 *3*		M4		40.1
734.40 *10*	(1/2)-	10.8 s *3*	734.4 *1*	100	[M4]		0.(
2588.41 *8*	5-	≥ 2.8 ps	1070.36 *5*	100	E1+M2	-0.01 *4*	0.(
3982.8 *3*	(23/2)-	> 0.9 ps	946.2 *3*	100			
3982.8 *3*	(23/2)-	> 0.9 ps	783.1 *7*		(M1)		1.(
1741.011 *8*	0+	> 1.39 ps	1201.503 *16*	100.0 *11*	(E2)		
1741.011 *8*	0+	> 1.39 ps	610.48 *10*		E0		
1741.011 *8*	0+	> 1.39 ps	1740.6 *2*		E0		
1741.011 *8*	0+	> 1.39 ps	378.90 *5*	75.4 *13*	E2		0.(
2075.675 *15*	6+	> 0.28 ps	849.22 *2*	100	E2		
2387.22 *7*	0+	> 0.52 ps	288.81 *10*	360 *60*	[E2]		0.(
2387.22 *7*	0+	> 0.52 ps	1847.68 *7*	78 *4*	[E2]		
2387.22 *7*	0+	> 0.52 ps	1025.13 *17*	100 *2*	[E2]		
2493.06 *4*	(3,4,5+)	> 0.83 ps	627.83 *8*	56 *7*			
2493.06 *4*	(3,4,5+)	> 0.83 ps	612.02 *5*	18.9 *18*			
2493.06 *4*	(3,4,5+)	> 0.83 ps	1266.46 *14*	100.0 *20*	D(+Q)	+0.4 *6*	
2493.06 *4*	(3,4,5+)	> 0.83 ps	430.42 *9*	45.5 *18*			
2569.912 *7*	(3)-	> 0.30 ps	403.042 *24*	100.0 *19*	(M1+E2)	+1.58 *7*	0.(
2569.912 *7*	(3)-	> 0.30 ps	2030.55 *8*	10.6 *14*			
2569.912 *7*	(3)-	> 0.30 ps	688.89 *3*	3.9 *3*			
2569.912 *7*	(3)-	> 0.30 ps	329.058 *12*	1.44 *21*			
2569.912 *7*	(3)-	> 0.30 ps	1343.47 *3*	56 *4*			
2569.912 *7*	(3)-	> 0.30 ps	470.82 *3*	3.2 *4*			
2569.912 *7*	(3)-	> 0.30 ps	1207.68 *6*	61 *13*			
2576.872 *15*	5(+)	> 125 fs	1350.431 *20*	100.0 *21*	D+Q		
2576.872 *15*	5(+)	> 125 fs	695.783 *21*	72 *9*	(E2)		0.(
2764.943 *18*	2+,3+	> 0.17 ps	398.6 *4*	33 *11*			
2764.943 *18*	2+,3+	> 0.17 ps	1538.33 *7*	100 *3*			
2764.943 *18*	2+,3+	> 0.17 ps	598.16 *6*	<103			
2764.943 *18*	2+,3+	> 0.17 ps	899.87 *10*	13 *3*			
2764.943 *18*	2+,3+	> 0.17 ps	413.703 *19*	8.8 *6*			
2764.943 *18*	2+,3+	> 0.17 ps	883.88 *9*	13 *3*			
3069.525 *6*	(1,2)-	> 0.45 ps	499.599 *7*	4.41 *6*	M1,E2		0.(
3069.525 *6*	(1,2)-	> 0.45 ps	2529.969 *20*	100.0 *8*	D+Q		
3069.525 *6*	(1,2)-	> 0.45 ps	902.673 *19*	3.75 *16*			
3069.525 *6*	(1,2)-	> 0.45 ps	552.706 *8*	4.31 *4*			
3069.525 *6*	(1,2)-	> 0.45 ps	409.18 *8*	0.26 *3*			
3069.525 *6*	(1,2)-	> 0.45 ps	1707.44 *6*	6.61 *9*	[E1]		
3069.525 *6*	(1,2)-	> 0.45 ps	828.70 *4*	0.48 *8*	[E1]		
3069.525 *6*	(1,2)-	> 0.45 ps	533.52 *7*	3.5 *6*	[E1]		
3069.525 *6*	(1,2)-	> 0.45 ps	3069.44 *16*	0.09 *9*	[M2]		
3069.525 *6*	(1,2)-	> 0.45 ps	154.007 *10*	1.03 *3*			
3069.525 *6*	(1,2)-	> 0.45 ps	1204.46 *5*	1.16 *8*	[E1]		
3069.525 *6*	(1,2)-	> 0.45 ps	600.124 *6*	9.20 *9*	M1,E2		0.(
3110.57 *11*	(2+,3+)	> 0.26 ps	943.70 *16*	100	[E1]		
422.22 *3*	3/2+	≥ 1.4 ps	114.6 *6*	3.1 *4*			

422.22 *3*	3/2+	≥ 1.4 ps	422.10 *7*	33.4 *21*			
422.22 *3*	3/2+	≥ 1.4 ps	110.94 *12*	5.8 *6*			
422.22 *3*	3/2+	≥ 1.4 ps	295.01 *3*	100 *3*			
422.22 *3*	3/2+	≥ 1.4 ps	97.5 *10*	10 *5*			
1622.3 *5*	19/2-	> 1.2 ps	663.9 *3*	100	E2		
1862.4 *4*	15/2+	> 1.7 ps	861.2 *3*	100	E2		
2173.9 *5*	17/2+	> 1.4 ps	673.0 *3*	100	E2		
543.3 *3*	(1/2)-	1.96 m *4*	543.3 *3*	100	[M4]		0.1
51.98 *9*	3+	1.51 m *2*	51.98 *9*	100	M3		641 1
258.76 *18*	1/2-	46.2 m *16*	258.76 *18*	100	M4		2.5
107.59 *20*	(5+)	4.6 m *2*	74.9 *2*	100	[E3]		51.6
107.59 *20*	(5+)	4.6 m *2*	32.7 *2*	0.11	[M3]		5.7
157.32 *3*	9/2+	4.34 d *1*	157.41 *4*	100	M4		29.2
140.73 *9*	6(+)	3.742 y *10*	98.8 *1*	100	M4		337
39.753 *6*	7/2+	56.114 m *9*	39.755 *6*	100	E3		*20*
128.9679 *5*	5+	4.34 m *3*	77.5447 *4*	100 *5*	E3		47
128.9679 *5*	5+	4.34 m *3*	31.866 *2*	0.0279 *23*	M3		
129.742 *4*	1/2-	42.8 s *3*	129.782 *4*	100	E3		3.9
268.36 *4*	1/2-	> 10 µs	268.36 *5*	100	(E3)		0.1
1875.13 *14*	(21/2+)	13.3 s *3*	524.0 *1*	100	(E4)		0.0
214.6 *3*	11/2-	21.3 s *5*	214.9 *5*	100	E3		0.4
1314.23 *6*	0+	> 25 ps	880.26 *7*	100	[E2]		
1314.23 *6*	0+	> 25 ps	383.2 *2*	20.9 *21*	[E2]		0.0
188.9903 *10*	11/2-	4.703 m *9*	188.990 *1*	100	E3		0.7
172.18 *8*	11/2-	5.5 h *1*	172.18 *8*	100	E3		1.1
89.21 *16*	(7/2-)	50 s *3*	89.3 *2*	100	E3		23.0
62.2+X *17*		> 20 µs	62.2 *17*				
506.2 *4*	(1/2-)	10.5 s *5*	163.6 *3*	100	E3		1.5
274.1 *3*	(1/2)-	3.10 s *10*	176.2 *5*	100	E3		1.1
9.40 *7*	2+	7.7 m *5*	9.40 *8*	100	(M3)		1.1
134.45 *4*	1/2-	5.7 s *3*	134.44 *4*	100	E3		3.6
6.90 *22*	2+	33.5 m *20*	6.9 *4*	100	[M3]		1.0
25.468 *16*	7/2+	7.23 m *16*	25.48 *2*	100	E3		2.2
93.125 *19*	7/2+	44.3 s *2*	93.124 *20*	100	E3		20.4
109.466 *7*	6+	438 y *9*	30.332 *8*	100	M4		4.1
88.0337 *10*	7/2+	39.79 s *21*	88.0336 *10*	100	E3		26.1
117.59 *5*	6+	249.83 d *4*	116.48 *5*	100	M4		164.9
59.82 *4*	7/2+	64.8 s *8*	59.78 *4*	100	E3		181
43.5 *1*	7/2+	68.7 s *16*	43.6 *2*	100	E3		
41.16 *10*	7/2+	18.0 s *7*	41.1 *2*	100	E3		1.4
47.90 *10*	(3+)	20 s *1*	47.9 *1*		E3		598 1
129.80 *22*	(6-)	9.3 s *3*	81.9 *2*	100	E3		37.4
28.6 *2*	(7/2+)	5.34 s *5*	28.6 *2*	100	E3		1.1
127.63 *10*	4(+)	2.0 s *2*	127.6 *1*	100	E3		4.6
1004.11 *10*	2+	> 1.0 ps	1004.1 *1*	100	(E2)		
6746.16 *15*	(14-)	> 5.5 ps	665.43 *8*	58 *3*	D+Q		
6746.16 *15*	(14-)	> 5.5 ps	422.70 *5*	71 *3*	(D)		
6746.16 *15*	(14-)	> 5.5 ps	676.44 *5*	100 *3*	Q		
7788.93 *18*	(16)	> 5.5 ps	1042.76 *4*	100	Q		
8099.66 *13*	(17-)	> 1.25 ps	767.77 *5*	24.7 *13*	D		
8099.66 *13*	(17-)	> 1.25 ps	1088.56 *4*	100 *4*	Q		
8099.66 *13*	(17-)	> 1.25 ps	837.98 *8*	19 *13*			
8942.69 *18*	(18-)	> 1.25 ps	433.92 *6*	30.8 *13*			
8942.69 *18*	(18-)	> 1.25 ps	843.46 *4*	100 *4*	D+Q		
396.214 *21*	11/2-	48.50 m *9*	150.824 *13*	100	E3		2.1
2300.68 *7*	0+	> 623 fs	1683.22 *10*	100.0 *12*	E2		5.4
2300.68 *7*	0+	> 623 fs	831.79 *10*	48.4 *12*	E2		1.7
2570.21 *6*	5-	> 693 fs	1154.75 *10*	100	E1		3.8
2570.21 *6*	5-	> 693 fs	197.03 *10*	95 *9*	M1		0.0
2570.21 *6*	5-	> 693 fs	699.59 *10*	71 *4*	E1		1.0

2570.21 *6*	5-	> 693 fs	565.10 *20*	31 *3*	E2		0.(
2571.47 *6*	6+	> 693 fs	700.89 *10*	100 *3*	E2		0.(
2571.47 *6*	6+	> 693 fs	403.55 *10*	5.9 *7*	M1+E2	-0.57 *6*	0.(
2571.47 *6*	6+	> 693 fs	1156.21 *10*	89 *5*	E2		8.3
2591.05 *5*	4-	> 693 fs	585.78 *10*	23.0 *7*	M1+E2	+0.47 *+8-7*	0.(
2591.05 *5*	4-	> 693 fs	1175.50 *10*	100.0 *11*	E1		3.8
2591.05 *5*	4-	> 693 fs	526.52 *10*	48.0 *11*	E1		0.(
2591.05 *5*	4-	> 693 fs	720.44 *10*	11.7 *7*	E1		9.3
2665.64 *6*	5+	> 208 fs	583.92 *10*	100	M1+E2	+0.30 *4*	0.(
2665.64 *6*	5+	> 208 fs	795.08 *13*	40 *3*	M1(+E2)	+0.14 *+18-17*	0.(
2665.64 *6*	5+	> 208 fs	601.01 *10*	60 *4*	E2		0.(
2665.64 *6*	5+	> 208 fs	1250.17 *10*	65.6 *24*	M1+E2	-0.12 *+6-5*	8.2
2773.08 *8*	(0)+	> 693 fs	1460.83 *10*	100.0 *10*	E2		5.8
2773.08 *8*	(0)+	> 693 fs	541.80 *10*	19.2 *10*	E2		0.(
2791.79 *11*	(4)-	> 97 fs	786.59 *10*	100	M1+E2	+0.038 *+49-14*	0.(
2816.71 *7*	4+	> 416 fs	811.3 *1*		E1		7.3
2816.71 *7*	4+	> 416 fs	735.20 *10*		M1+E2	+4.0 *+39-13*	0.(
2816.71 *7*	4+	> 416 fs	1401.3 *1*		M1+E2		6.8
2834.27 *7*	0+	> 347 fs	712.68 *10*	19 *4*	E2		0.(
2834.27 *7*	0+	> 347 fs	2216.74 *10*	100	E2		6.4
2834.27 *7*	0+	> 347 fs	1521.82 *12*	26.2 *19*	E2		5.6
2840.22 *11*	(4)+	> 485 fs	1424.73 *10*	100	M1+E2	-1.28 *+18-24*	6.2
2882.82 *8*	0+	> 693 fs	1570.51 *14*	28.5 *25*	E2		5.5
2882.82 *8*	0+	> 693 fs	1413.86 *10*	100 *5*	E2		6.(
2882.82 *8*	0+	> 693 fs	726.79 *14*	36 *5*	E2		0.(
2893.51 *6*	4+	> 416 fs	811.9 *1*		M1+E2		0.(
2893.51 *6*	4+	> 416 fs	771.76 *10*	37 *4*	E2		0.(
2893.51 *6*	4+	> 416 fs	2276.07 *10*	100 *4*	E2		6.5
2924.83 *5*	4-	> 139 fs	1509.36 *10*	75.9 *23*	E1		4.7
2924.83 *5*	4-	> 139 fs	551.63 *10*	28 *3*	M1+E2		0.(
2924.83 *5*	4-	> 139 fs	1054.24 *10*	62 *3*	E1		4.4
2924.83 *5*	4-	> 139 fs	333.72 *10*	60 *3*	M1+E2	-0.21 *+18-17*	0.(
2924.83 *5*	4-	> 139 fs	919.58 *10*	100 *3*	M1+E2	-0.22 *10*	1.5
3066.23 *10*	(2,3)-	> 207 fs	2448.76 *10*	100.0 *23*	E1		1.(
3066.23 *10*	(2,3)-	> 207 fs	1753.8	56.3 *23*	E1		6.(
3068.62 *6*	4+	> 555 fs	1653.09 *10*	44.8 *17*	M1+E2	-0.54 *21*	5.7
3068.62 *6*	4+	> 555 fs	1599.70 *10*	93.4 *22*	E2		5.5
3068.62 *6*	4+	> 555 fs	1756.30 *14*	36.5 *22*	E2		5.4
3068.62 *6*	4+	> 555 fs	1063.49 *10*	100.0 *19*	E1		4.3
3071.46 *8*	(4)+	> 249 fs	1066.28 *10*	39 *4*			
3071.46 *8*	(4)+	> 249 fs	1006.9 *1*	100 *4*			
3189.82 *9*	4+,5,6+	> 354 fs	1774.30 *10*	100 *4*			
3189.82 *9*	4+,5,6+	> 354 fs	1022.09 *13*	83 *4*			
3205.74 *12*	2+,3,4	> 111 fs	1790.2				
3205.74 *12*	2+,3,4	> 111 fs	1736.90 *12*	100			
3392.78 *12*	1,2+	> 693 fs	3392.72 *12*	100			
3393.39 *4*	0+:4+	> 970 fs	2775.83 *4*	100			
3402.93 *10*	1+,2+,3+	> 527 fs	2785.37 *10*	100	M1+E2	-1.8 *+3-4*	8.2
3511.6 *3*	3-:7-	> 485 fs	1138.4 *3*	100			
3754.09 *11*	2+:6+	> 416 fs	2338.58 *10*	100			
263.54 *3*	11/2-	14.1 y *5*	263.7 *3*	100	E5		4.2
1864.262 *8*	3+	> 0.87 ps	580.516 *5*	22.8 *12*	M1		
1864.262 *8*	3+	> 0.87 ps	1305.783 *21*	86 *5*	M1+E2	-0.10 *+6-2*	
1864.262 *8*	3+	> 0.87 ps	499.92 *3*	0.4 *1*	M1		
1864.262 *8*	3+	> 0.87 ps	654.551 *5*	100 *5*	M1+E2	-4.2 *+8-6*	
1864.262 *8*	3+	> 0.87 ps	132.015 *9*	0.041	M1+E2	<0.65	
1932.077 *8*	(4)+	> 0.31 ps	199.833 *4*	2.4 *10*	M1		
1932.077 *8*	(4)+	> 0.31 ps	648.316 *17*	66 *6*	M1,E2(+E0)		
1932.077 *8*	(4)+	> 0.31 ps	567.74 *3*	34.5 *15*	E2		
1932.077 *8*	(4)+	> 0.31 ps	722.368 *6*	100 *5*	E2		

2152.266 *8*	3+,4+	> 0.35 ps	786.8 *4*	<13			
2152.266 *8*	3+,4+	> 0.35 ps	287.981 *9*	24.3 *12*	M1		
2152.266 *8*	3+,4+	> 0.35 ps	942.55 *3*	100 *9*	M1+E2		
2152.266 *8*	3+,4+	> 0.35 ps	420.023 *4*	37 *3*	M1+E2		
2152.266 *8*	3+,4+	> 0.35 ps	220.189 *4*	4.5 *4*	M1,E2		
2152.266 *8*	3+,4+	> 0.35 ps	868.513 *17*	63 *4*	M1,E2		
2152.266 *8*	3+,4+	> 0.35 ps	310.316 *6*	20.2 *11*	E2		
2152.266 *8*	3+,4+	> 0.35 ps	1593.3 *6*	<43			
2204.561 *8*	3+	> 0.55 ps	472.310 *8*	4.5 *2*	M1		
2204.561 *8*	3+	> 0.55 ps	246.472 *4*	1 *1*	E1		
2204.561 *8*	3+	> 0.55 ps	920.791 *13*	73 *6*	M1		
2204.561 *8*	3+	> 0.55 ps	362.608 *5*	4.4 *2*	M1(+E2)	<0.82	
2204.561 *8*	3+	> 0.55 ps	156.531 *3*	0.3 *3*	M1(+E2)	<0.42	
2204.561 *8*	3+	> 0.55 ps	1646.12 *4*	100 *5*	M1+E2	-0.10 *+3-5*	
2204.561 *8*	3+	> 0.55 ps	840.217 *12*	43 *5*	M1		
2204.561 *8*	3+	> 0.55 ps	340.294 *7*	3.8 *2*	M1,E2+E0		
2204.561 *8*	3+	> 0.55 ps	994.852 *9*	71 *4*	M1+E2	0.8 *+7-3*	
2298.93 *2*	5-	> 1.04 ps	366.91 *4*	3 *1*			
2298.93 *2*	5-	> 1.04 ps	1015.178 *17*	100	E1		
2437.64 *8*	0+	> 0.90 ps	1879.10 *5*	100 *6*	E2		
2437.64 *8*	0+	> 0.90 ps	1228.00 *10*	8.6 *11*	E2		
2437.64 *8*	0+	> 0.90 ps	2437.7 *1*	14	E0		
2460.757 *12*	4-	> 0.68 ps	728.56 *6*	9.7 *17*			
2460.757 *12*	4-	> 0.68 ps	256.195 *4*	12.5 *6*	E1		
2460.757 *12*	4-	> 0.68 ps	1902.19 *14*	97 *17*			
2460.757 *12*	4-	> 0.68 ps	596.485 *5*	61 *6*	E1		
2460.757 *12*	4-	> 0.68 ps	1177.04 *3*	100 *7*	E1		
2460.757 *12*	4-	> 0.68 ps	502.667 *10*	18.0 *13*	M1,E2		
2525.420 *10*	2+	> 0.35 ps	1315.677 *22*	100 *10*	M1		
2525.420 *10*	2+	> 0.35 ps	140.659 *3*	0.5 *1*	E1		
2525.420 *10*	2+	> 0.35 ps	665.735 *15*	10.0 *6*	E2		
2525.420 *10*	2+	> 0.35 ps	2525.1 *1*	58 *10*			
2525.420 *10*	2+	> 0.35 ps	320.835 *13*	0.7 *1*	M1		
2525.420 *10*	2+	> 0.35 ps	1219.78 *3*	73 *5*	E2		
2525.420 *10*	2+	> 0.35 ps	661.21 *3*	5.4 *6*	M1		
2525.420 *10*	2+	> 0.35 ps	1966.80 *20*	87 *16*			
2525.420 *10*	2+	> 0.35 ps	306.560 *7*	7.6 *4*	E2+M1	>0.82	
2525.420 *10*	2+	> 0.35 ps	1161.06 *3*	56 *5*	M1		
2525.420 *10*	2+	> 0.35 ps	567.328 *7*	30 *6*	E1		
2874.26 *6*	2,4	> 0.62 ps	1664.77 *9*	33 *1*			
2874.26 *6*	2,4	> 0.62 ps	916.27 *9*	19 *1*			
2874.26 *6*	2,4	> 0.62 ps	2316.2 *2*				
2874.26 *6*	2,4	> 0.62 ps	826.11 *8*	100 *2*			
2935.76 *6*	2+	> 0.35 ps	1652.53 *9*	100 *2*	E2		
2935.76 *6*	2+	> 0.35 ps	2377.67 *9*	93 *6*	M1+E2		
2935.76 *6*	2+	> 0.35 ps	1629.36 *10*	56 *1*	E2		
2935.76 *6*	2+	> 0.35 ps	1725.78 *20*	85 *3*	M1+E2	-1.5 *+1-14*	
631.7 *1*	(1/2-)	34 s *2*	631.7 *1*		(M4)		
93.48 *10*	(3+)	15.7 s *5*	93.5 *1*	100	M3		62.(
674.09 *25*	(1/2-)	48 s *6*	674.1 *3*	100	M4		
678.5 *3*	1/2-	50.4 s *6*	678.5 *3*	100	M4		0.(
649.79 *10*	1/2-	1.34 m *6*	649.8 *2*	100	M4		0.(
3285.8 *3*	19/2-	> 1.0 ps	218.48 *11*	100	M1		0.(
334.09 *5*	2+	≥ 4.9 ps	272.018 *15*	100 *3*	M1+E2	+0.06 *4*	0.(
334.09 *5*	2+	≥ 4.9 ps	131.63 *8*	0.39 *3*			
342.55 *5*	1+	≥ 4.9 ps	280.459 *15*	100 *4*	M1(+E2)	+0.04 *22*	0.(
799.851 *16*	7-	≥ 2.0 ps	386.36 *2*	23.1 *6*	E1		0.(
799.851 *16*	7-	≥ 2.0 ps	231.52 *10*	2.14 *20*	[E1]		0.(
799.851 *16*	7-	≥ 2.0 ps	799.83 *2*	100.0 *20*	E1		0.(
808.072 *21*	8-	≥ 2.4 ps	93.44 *20*	1.67 *19*	E1		0.2

808.072 *21*	8-	≥ 2.4 ps	808.09 *3*	100.0 *25*	E1		0.(
808.072 *21*	8-	≥ 2.4 ps	8.0 *10*	0.37 *19*	[M1+E2]		4E-
808.072 *21*	8-	≥ 2.4 ps	394.59 *2*	42.8 *11*	E1		0.(
1006.06 *3*	(5,6)	≥ 1.7 ps	569.06 *19*	7.2 *9*			
1006.06 *3*	(5,6)	≥ 1.7 ps	149.80 *2*	100 *5*	M1		0.1
1017.93 *4*	9-	≥ 1.2 ps	209.80 *4*	100	M1+E2		0.(
1204.87 *5*	4-,5-,6-	≥ 1.1 ps	198.81 *4*	100	M1+E2		0.1
1482.35 *6*		≥ 1.8 ps	277.48 *3*	100			
536.99 *7*	1/2-	7.7 m *2*	537.22 *9*	100	M4		0.1
2767.78 *25*	5/2+	> 1.4 ps	2767.3 *4*	63 *13*			
2767.78 *25*	5/2+	> 1.4 ps	1580.4 *3*	100 *10*			
3024.53 *14*	23/2-	> 1.4 ps	281.7 *2*	100	M1+E2	+0.02 *6*	
156.592 *25*	4+	20.67 m *8*	156.61 *3*	100	M3		6.5
391.699 *3*	1/2-	99.476 m *23*	391.698 *3*	100	M4		0.5
190.2682 *8*	5+	49.51 d *1*	190.2684 *8*	100	E4		5.(
336.244 *17*	1/2-	4.486 h *4*	336.241 *25*	100	M4		1.(
289.660 *6*	8-	2.18 s *4*	162.393 *7*	100	E3		1.7
315.303 *11*	1/2-	116.2 m *3*	315.302 *13*	100	M4		1.4
≈200	8-	8.5 s *3*	138.2 *5*	100	(E3)		3.5
311.37 *3*	1/2-	18.0 m *3*	311.39 *3*	100	M4		1.5
313.68 *7*	1/2-	3.88 m *10*	313.60 *9*	100	M4		1.4
2078.1+X	(21/2-)	≥ 100 μs	X				
2257.4 *3*	(17/2)+	≥ 4 ns	192.3 *2*	100	M1(+E2)	-0.03 *3*	
2190.81 *6*	0+	≥ 2.7 ps	2190.9 *5*		E0		
2190.81 *6*	0+	≥ 2.7 ps	934.12 *4*	100	E2		1.5
2476.16 *11*	2+	> 2.4 ps	1219.34 *13*	20.5 *24*	M1+E2	-0.54 *7*	9.7
2476.16 *11*	2+	> 2.4 ps	286				
2476.16 *11*	2+	> 2.4 ps	2475.8 *3*	100.0 *24*	E2		7.4
2617.62 *18*	0+	> 0.4 ps	1360.92 *17*	100	E2		7.(
2756.02 *9*	3+	> 0.8 ps	508.8 *3*		M1+E2	0.2 *1*	0.(
2756.02 *9*	3+	> 0.8 ps	234.8 *3*	5.9 *6*	[M1+E2]		0.(
2756.02 *9*	3+	> 0.8 ps	1499.5 *1*	100 *3*	M1(+E2)	≤0.08	7.1
2756.02 *9*	3+	> 0.8 ps	401.3 *5*	2.6 *6*	[E1]		0.(
2756.02 *9*	3+	> 0.8 ps	605.1 *2*	21.2 *13*	[M1+E2]		0.(
2756.02 *9*	3+	> 0.8 ps	279.5 *2*	4.0 *4*	[M1+E2]		0.(
2765.2 *3*	0+:4+	> 1.0 ps	1508.5 *3*	100			
2913.07 *21*	4+	> 0.6 ps	665.6 *3*	100 *3*	[M1]		0.(
2913.07 *21*	4+	> 0.6 ps	392.8 *5*	12 *3*	[M1]		0.(
2913.07 *21*	4+	> 0.6 ps	1656.3 *4*	35 *3*	E2		5.9
2917.39 *10*	2+,3,4+	> 1.1 ps	767.0 *2*	11.8 *8*			
2917.39 *10*	2+,3,4+	> 1.1 ps	669.9 *1*	100 *15*			
2926.82 *18*	6+	> 0.22 ps	378.6 *3*	100	M1		0.(
2945.70 *13*	4+	> 1.1 ps	470				
2945.70 *13*	4+	> 1.1 ps	1688.7 *3*	100	E2		5.9
2945.70 *13*	4+	> 1.1 ps	794.5 *2*		E2		0.(
2986.4 *3*	0+	> 1.7 ps	1729.7 *3*	100	E2		5.9
3078.53 *13*	(2,3)+	> 1.2 ps	927.7 *2*	97 *3*	M1+E2	0.60 *+1-2*	0.(
3078.53 *13*	(2,3)+	> 1.2 ps	831.1 *4*	8.8 *19*			
3078.53 *13*	(2,3)+	> 1.2 ps	1821.8 *2*	100 *4*	M1+E2	-1.3 *+3-5*	6.1
3078.53 *13*	(2,3)+	> 1.2 ps	557.8 *3*	12.0 *8*			
3133.42 *11*	5-	> 1.0 ps	779.3 *2*	16.3 *12*	E2		0.(
3133.42 *11*	5-	> 1.0 ps	886.0 *1*	100.0 *12*	E1		6.9
3248.69 *10*	2+	> 1.1 ps	3248.8 *8*	100.0 *21*	E2		1.(
3248.69 *10*	2+	> 1.1 ps	894.2 *2*	27 *19*	[E1]		6.7
3248.69 *10*	2+	> 1.1 ps	1992.25 *12*	22.9 *13*	M1+E2		6.4
3248.69 *10*	2+	> 1.1 ps	772.44 *24*	25.9 *19*	[M1+E2]		0.(
3248.69 *10*	2+	> 1.1 ps	1097.4 *2*		[M1+E2]		1.2
3338.3 *3*	2+	> 0.3 ps	2081.6 *3*	100	M1+E2		6.5
3353.1 *4*	2+	> 1.4 ps	2096.4 *4*	9 *3*	M1+E2		6.5
3353.1 *4*	2+	> 1.4 ps	3353.0 *5*	100 *3*	E2		1.(

3417.41 *11*	4+	> 0.4 ps	2160.7 *1*	100	E2		6.5
3456.31 *20*	2+,3+	> 0.7 ps	700.3 *6*	22 *5*			
3456.31 *20*	2+,3+	> 0.7 ps	2199.6 *2*	100 *6*	M1+E2	2.8 *10*	6.(
3471.7 *3*	4+	> 0.23 ps	951.0 *3*	100	[M1]		1.7
3524.54 *18*	2+	> 0.12 ps	431.9 *6*	9.2 *14*	[M1]		0.(
3524.54 *18*	2+	> 0.12 ps	2267.80 *20*	100 *8*	M1(+E2)	≥-0.5	6.8
3524.54 *18*	2+	> 0.12 ps	1277.7 *5*	22 *8*	E2		7.8
3524.54 *18*	2+	> 0.12 ps	3524.2 *10*		E2		1.1
3557.29 *12*		> 0.3 ps	1203.1 *1*	100.0 *23*			
3557.29 *12*		> 0.3 ps	1036.1 *4*	16.3 *23*			
77.389 *19*	7/2+	21.4 m *4*	77.38 *2*	100	M3+E4	0.13 *2*	181
498.07 *5*	3/2+	> 0.35 ps	420.7 *2*	0.3 *2*			
498.07 *5*	3/2+	> 0.35 ps	88.25 *2*	3.4 *4*			
498.07 *5*	3/2+	> 0.35 ps	497.96 *9*	100 *5*	M1+E2	0.12 *6*	
2200.7 *3*	5/2+	> 0.24 ps	1702.6 *3*	100	M1+E2	-0.5 *3*	
3223.2 *5*	(19/2)-	> 1.4 ps	1316.5 *3*	100	Q		
4475.1 *6*	(27/2+)	> 1.1 ps	417.1 *3*	100	M1+E2	0.4 *2*	
2156.28 *3*	0+	> 7.6 ps	856.37 *3*	100	E2		
2815.146 *22*	5-	> 1.4 ps	627.54 *2*	100 *3*	E1		
2815.146 *22*	5-	> 1.4 ps	540.15 *13*	10.5 *3*	E2		
2815.146 *22*	5-	> 1.4 ps	200.84 *12*	1.3 *3*			
3244.39 *7*	6-	> 1.4 ps	429.19 *8*	100.0 *7*	M1+E2	+0.161 *+4-3*	
3244.39 *7*	6-	> 1.4 ps	157.1 *1*	5.09 *15*			
2592.35 *19*	(15/2-)	> 2.4 ps	1878.9 *2*	100			
2938.24 *17*	(17/2-)	> 1.7 ps	346.1 *2*	20 *10*			
2938.24 *17*	(17/2-)	> 1.7 ps	992.2 *2*	100 *18*			
2938.24 *17*	(17/2-)	> 1.7 ps	253.1 *3*	43 *12*			
2938.24 *17*	(17/2-)	> 1.7 ps	912.8 *5*	65 *22*			
3203.81 *12*	17/2-	> 1.0 ps	360.1 *5*	39 *3*			
3203.81 *12*	17/2-	> 1.0 ps	559.4 *3*	11.2 *19*			
3203.81 *12*	17/2-	> 1.0 ps	1257.8 *2*	21 *3*			
3203.81 *12*	17/2-	> 1.0 ps	550.1 *1*	100 *3*			
3203.81 *12*	17/2-	> 1.0 ps	1178.4 *3*	55 *6*			
4060.18 *13*	(23/2-)	> 1.0 ps	801.4 *2*	4.6 *5*			
4060.18 *13*	(23/2-)	> 1.0 ps	181.0 *1*	3.4 *3*			
4060.18 *13*	(23/2-)	> 1.0 ps	741.6 *1*	100 *4*	E2		
4060.18 *13*	(23/2-)	> 1.0 ps	1055.9 *1*	21.8 *11*	E2		
4060.18 *13*	(23/2-)	> 1.0 ps	588.2 *1*	6.5 *5*	(E2)		
314.58 *4*	11/2-	14.00 d *5*	156.02 *3*	100	M4		46.9
314.58 *4*	11/2-	14.00 d *5*	314.3 *3*	0.020 *5*	[E5]		1.7
2328.02 *3*	2+	> 0.2 ps	1098.2 *5*	100 *19*	E2(+M1)		
2328.02 *3*	2+	> 0.2 ps	285.22 *11*	5.1 *6*			
2328.02 *3*	2+	> 0.2 ps	2327.82 *8*	23.4 *8*	E2		
2488.871 *19*	4+	> 0.55 ps	445.99 *1*	100 *3*	E2		0.(
2488.871 *19*	4+	> 0.55 ps	208.52 *2*	52 *7*	M1+E2	-0.17 *4*	0.(
2488.871 *19*	4+	> 0.55 ps	1259.19 *2*	67 *3*	E2		
2677.35 *3*	2+	> 0.28 ps	1447.66 *3*	86 *4*	M1+E2	+2.46 *+17-13*	
2677.35 *3*	2+	> 0.28 ps	2677.35 *4*	100 *4*	E2		
89.531 *13*	11/2-	293.1 d *7*	65.66 *1*	100	M4		5.(
2159.931 *25*	0+	> 4 ps	988.66 *2*	100			
2587.25 *15*	0+	> 0.34 ps	1415.88 *15*	100			
2643.353 *20*	4+	> 1.0 ps	449.06 *4*	15.4 *7*	M1+E2	-0.38 *12*	
2643.353 *20*	4+	> 1.0 ps	1472.07 *2*	100 *4*	E2		
2643.353 *20*	4+	> 1.0 ps	177.70 *8*	7.7 *20*			
2643.353 *20*	4+	> 1.0 ps	546.13 *2*	37.5 *13*	E2		
6.31 *6*	11/2-	43.9 y *5*	6.29 *8*	100	[M4]		8.7
2087.71 *5*	0+	> 0.277 ps	947.19 *4*	100	E2		
2675.57 *6*	0+	> 0.2 ps	1535.05 *5*	100			
2192.17 *3*	0+	> 0.55 ps	1060.42 *2*	100	E2		1.1
2688.50 *5*	0+	> 0.28 ps	1556.77 *5*	100.0 *13*			

2688.50 *5*	0+	> 0.28 ps	558.81 *12*	28.2 *13*	E2			
2819.3 *5*	(6+)	> 0.4 ps	717.6 *5*	100	E2			
2836.58 *4*	3+	> 0.28 ps	1704.87 *11*	27.8 *10*	(M1+E2)	+1.5 *3*	6.1	
2836.58 *4*	3+	> 0.28 ps	614.76 *6*	34.5 *18*	(M1+E2)		0.(	
2836.58 *4*	3+	> 0.28 ps	735.34 *18*	18.6 *17*	(M1+E2)	-0.94 *10*	0.(	
2836.58 *4*	3+	> 0.28 ps	706.98 *4*	100.0 *17*	M1+E2	+2.1 *3*	0.(	
2958.11 *6*	4+	> 0.9 ps	856.55 *13*	35.7 *26*	(M1+E2)		0.(	
2958.11 *6*	4+	> 0.9 ps	737.4 *5*	43 *6*	D+Q	+0.6 *9*		
2958.11 *6*	4+	> 0.9 ps	1826.38 *7*	100 *5*				
2958.11 *6*	4+	> 0.9 ps	531.1 *2*	26 *3*	(Q)			
2988.03 *3*	3-	> 0.55 ps	1856.33 *3*	100 *8*	E1(+M2)	-0.02 *2*	6.8	
2988.03 *3*	3-	> 0.55 ps	234.95 *7*	16.5 *11*	(M1+E2)	-0.07 *11*	0.(	
2988.03 *3*	3-	> 0.55 ps	385.38 *5*	53 *4*	M1+E2	+1.7 *3*	0.(	
2988.03 *3*	3-	> 0.55 ps	373.75 *13*	10.5 *10*	(M1+E2)		0.(	
3267.13 *9*	1,2,3	> 0.14 ps	2135.37 *8*	100	D,D+Q			
2091.50 *11*	(7-)	6.5 s *5*	91.15 *10*	100	E3		26.1	
2638.42 *9*	15/2-	> 2.1 ps	322.34 *14*	23.7 *20*	M1+E2	-0.14 *9*	0.(	
2638.42 *9*	15/2-	> 2.1 ps	1338.24 *9*	100 *5*	E2			
1159.99 *8*	9/2+	> 2 ps	632.7 *1*	3.4 *2*	E2			
1159.99 *8*	9/2+	> 2 ps	1160.0 *1*	100 *2*	E2			
1310.62 *14*	9/2+	> 50 fs	783.2 *3*	17 *3*	M1+E2	-0.16 *8*		
1310.62 *14*	9/2+	> 50 fs	221.7					
1310.62 *14*	9/2+	> 50 fs	1310.5 *2*	100 *2*	E2			
1536.53 *16*	(9/2+)	≥ 243 fs	1009.2 *6*	100 *3*	M1+E2	-0.4 *3*		
1536.53 *16*	(9/2+)	≥ 243 fs	447.1 *2*	5.6 *11*				
1536.53 *16*	(9/2+)	≥ 243 fs	1536.6 *2*	14.4 *11*				
1623.9 *12*	3/2	≥ 132 fs	700.0					
2323.05 *13*	15/2-	> 2 ps	1000.1 *1*	100	E2			
2778.65 *25*	17/2+	> 1.4 ps	591.2 *2*	100	E2			
3214.13 *15*	19/2-	> 1.4 ps	589.6 *2*	100 *5*	E1			
3214.13 *15*	19/2-	> 1.4 ps	141.5 *2*	2.0 *5*				
3214.13 *15*	19/2-	> 1.4 ps	891.3 *2*	62 *2*	E2			
3214.13 *15*	19/2-	> 1.4 ps	433.5 *2*	21 *1*	M1,E2			
3214.13 *15*	19/2-	> 1.4 ps	801.6 *2*	3.6 *5*	E2			
3214.13 *15*	19/2-	> 1.4 ps	372.5 *2*	87 *4*	M1,E2			
699.88 *5*	3/2+,5/2+	> 300 fs	699.85 *6*	100 *5*	M1,E2		0.(	
699.88 *5*	3/2+,5/2+	> 300 fs	429.50 *10*	0.83 *25*	E2		0.(	
1048.42 *5*	7/2+	> 300 fs	777.91 *19*	2.1 *12*	[M1]		0.(	
1048.42 *5*	7/2+	> 300 fs	1048.44 *6*	100.0 *15*	M1(+E2)	≤0.97	0.(	
1327.25 *11*	(1/2-)	> 76 fs	683.21 *10*	100 *23*	[E1]		0.(	
1327.25 *11*	(1/2-)	> 76 fs	627.72	13	[E1]		0.(	
1327.25 *11*	(1/2-)	> 76 fs	1327.38	8				
1487.61 *6*	(3/2+)	> 215 fs	1216.87 *20*	0.14				
1487.61 *6*	(3/2+)	> 215 fs	149.36 *20*	10	[M1,E2]		0.1	
1487.61 *6*	(3/2+)	> 215 fs	843.57 *8*	100 *14*				
1487.61 *6*	(3/2+)	> 215 fs	1487.36 *20*	0.29				
1487.61 *6*	(3/2+)	> 215 fs	787.76 *10*	91 *14*				
1646.5 *10*	1/2+	> 450 fs	1646.5	100				
1848.2 *10*		> 130 fs	1848.2	100				
1035.429 *14*	9/2+	> 0.3×10^{-3} ps	1035.40 *10*	0.72 *30*				
1035.429 *14*	9/2+	> 0.3×10^{-3} ps	998.291 *11*	100 *2*	M1+E2		0.(	
163.5591 *17*	(8)-	4.191 m *3*	26.0867 *24*	100	(E3)		3.(	
10.8627 *8*	5+	93 s *5*	10.8630 *11*	100	[M2]		2.1	
36.8440 *14*	(8)-	20.2 m *2*	25.981 *3*	100	E3		2.9	
17.7 *3*	(5+)	19.15 m *9*	17.7 *3*	100	(E3)		3.2	
40.4 *3*	(3-)	≈ 11 s	22.70 *7*	100	(M2)		718 1	
0.0+X	5+	10.41 m *18*	<20.0		[E3]			
1851.31 *6*	(19/2-)	17.7 m *1*	722.69 *5*	100	(M4)		0.(	
293.974 *22*	11/2-	164.2 d *8*	81.788 *18*	100	M4			
1357.401 *24*	0+	> 1.39 ps	1357.4 *1*		E0			

1357.401 *24*	0+	> 1.39 ps	793.27 *2*	100 *2*				
1747.04 *3*	0+	> 1.32 ps	490.24 *5*	41 *1*				
1747.04 *3*	0+	> 1.32 ps	1182.88 *3*	100 *1*				
1940.44 *9*	0+	> 1.39 ps	683.48 *17*	100 *2*				
1940.44 *9*	0+	> 1.39 ps	1940.6 *2*		E0			
1940.44 *9*	0+	> 1.39 ps	583.1 *2*		E0			
1940.44 *9*	0+	> 1.39 ps	1376.23 *13*	4.7 *6*				
2535.72 *7*	3,4,5	> 0.47 ps	1354.46 *6*	100	D+Q	-1.0 *+3-4*		
2538.84 *5*		> 0.76 ps	628.93 *20*	19.8 *12*				
2538.84 *5*		> 0.76 ps	586.90 *4*	100.0 *10*	D+Q			
2538.84 *5*		> 0.76 ps	1357.70 *8*	35.8 *9*				
247.45 *4*	11/2-	119.2 d *3*	247.5 *2*	0.37 *4*	[E5]			7.8
247.45 *4*	11/2-	119.2 d *3*	88.46 *3*	100 *4*	M4			
144.775 *8*	11/2-	57.40 d *15*	144.780 *25*	1.4E-4	[E5]			259
144.775 *8*	11/2-	57.40 d *15*	109.276 *15*	100 *1*	M4			356
2218.085 *19*	5-	> 1.4 ps	856.80 *2*	100 *3*	E1+M2	+0.029 *6*		
2218.085 *19*	5-	> 1.4 ps	204.71 *7*	1.88 *13*	E1			0.0
3096.79 *20*		> 0.52 ps	1676.69 *6*	1.0E2 *4*				
3096.79 *20*		> 0.52 ps	2430.24 *8*	59 *22*				
88.23 *7*	11/2-	106.1 d *7*	88.3 *1*	100	M4			
2308.30 *4*	0+	> 1.7 ps	788.29 *8*	39 *4*				
2308.30 *4*	0+	> 1.7 ps	1565.08 *4*	100 *6*				
105.51 *3*	11/2-	33.6 d *1*	105.50 *5*	100	M4			429
182.258 *18*	11/2-	33.25 h *25*	182.25 *2*	100	(M4)			25.2
334.26 *4*	(11/2-)	55.4 m *4*	334.27 *4*	100	M4			1.4
265.9	(7)	6.2 s *5*	134.47 *16*	100	M3			17.9
104.0+X *20*	(7-)	8.5 m *5*	104 *2*	100				
39.9525 *13*	2+	8.84 m *6*	39.9542 *21*	100	M3			4.9
120 *20*	(8-)	1.387 h *15*	98.0 *10*	100	E3			21.6
1634.148 *10*	(19/2-)	9 s *2*	74.05 *1*	100	(M2)			23.6
316.49 *22*	(8)-	3.52 m *4*	272.1 *1*	100	E3			0.2
316.49 *22*	(8)-	3.52 m *4*	316.3 *10*	<0.6	[M4]			1.9
252.61 *14*	9/2(-)	57 s *1*	140.5 *2*	100	E3			4.1
297.10 *8*	9/2-	69.2 s *9*	172.4 *1*	100	E3			1.6
236.14 *3*	11/2-	8.88 d *2*	196.56 *3*	100	M4			20.1
163.930 *8*	11/2-	11.84 d *4*	163.930 *8*	100	M4			50.2
233.221 *15*	11/2-	2.198 d *13*	233.221 *15*	100	M4+E5	0.10 *8*		8.8
526.551 *13*	11/2-	15.29 m *5*	526.561 *17*	100	M4			0.2
68.5 *3*	9/2(+)	122 s *3*	68.5 *3*	100	M3			433 1
45.87 *12*	(3)+	> 1 μs	45.85 *15*	100	E2			33.8
156.27 *5*	11/2(-)	1.7 s *2*	61.70 *5*		E3			289
462.63 *14*	(7)+	6.3 s *2*	64.90 *5*	100 *20*	M2			46.9
462.63 *14*	(7)+	6.3 s *2*	161.0	≈33	(E3)			2.1
272.44 *25*	(4)-	≥ 1 μs	55					
272.44 *25*	(4)-	≥ 1 μs	31.0					
163.25 *11*	5-	3.46 m *6*	31.5 *3*	0.54 *6*	[E3]			1.9
163.25 *11*	5-	3.46 m *6*	14.9 *3*	0.00038 *6*	[M3]			2.2
163.25 *11*	5-	3.46 m *6*	82.9 *1*	100 *6*	E3			59.4
138.7441 *26*	8-	2.912 h *2*	138.733 *11*	0.031 *4*	M4			131.8
138.7441 *26*	8-	2.912 h *2*	127.5021 *28*	100 *10*	E3			6.8
1632.9	19/2-	53 m *2*	846.1	100	M4			0.0
517.9 *1*	8-	17.5 s *2*	517.9 *1*	100	E3			
517.9 *1*	8-	17.5 s *2*	413.1 *3*	0.072	M4			
79.9 *3*	6-	2.91 m *10*	79.9 *3*	100	M3			213 5
80.32 *11*	7/2-	1.93 s *7*	24.2 *1*	100 *20*	M2			995 2
80.32 *11*	7/2-	1.93 s *7*	80.2 *2*	58 *7*	E3			74.8
8.42 *6*	7/2+	2.135 h *10*	8.4 *2*		[M3]			1.0
187.995 *9*	9/2-	14.6 m *2*	79.918 *7*	100	E3			80.1
288.252 *9*	11/2-	38.93 h *10*	288 *1*	0.036 *25*	[E5]			4.0
288.252 *9*	11/2-	38.93 h *10*	275.925 *7*	100.000	M4			4.6

268.218 *20*	11/2-	28.7 h *2*	268.218 *20*	100		M4		5.1
1578.969 *22*	0+	> 735 fs	1579.819			E0		
1578.969 *22*	0+	> 735 fs	760.45 *2*	100		E2		0.(
2315.26 *7*	0+	> 0.85 ps	1496.73 *7*	100		E2		8.7
2587.08 *3*	(5)+	> 0.83 ps	720.47 *2*	100		M1+E2	-0.14 *2*	0.(
661.659 *3*	11/2-	2.552 m *1*	661.657 *3*	100		M4		0.1
2189.861 *22*	(1,2+)	≥ 0.8 ps	2189.2 *4*	4.4 *11*				
2189.861 *22*	(1,2+)	≥ 0.8 ps	754.05 *2*	100 *6*				
3504.28 *10*	2-	≥ 0.2 ps	1605.4 *2*	54 *5*				
3504.28 *10*	2-	≥ 0.2 ps	3504.91 *18*	100 *8*		Q		
3504.28 *10*	2-	≥ 0.2 ps	2068.15 *15*	<52				
3600.73 *10*	1	≥ 0.09 ps	3600.56 *17*	86 *9*		D		
3600.73 *10*	1	≥ 0.09 ps	2164.96 *12*	100 *10*				
1558.03 *23*	(23/2-)	≥ 1.2 ps	641.4 *3*	100		(E2)		
188.20 *11*	6-	24.3 m *5*	188.5 *3*	100		E4		8.1
188.20 *11*	6-	24.3 m *5*	52.8 *1*	13.5 *10*		M3		
36.8 *12*	(7/2-)	> 10 μs	29.56 *5*	100.0		[E1]		1.1
1451.8 *4*	(19/2-)	> 2.8 ps	641.9 *4*			(E2)		
1451.8 *4*	(19/2-)	> 2.8 ps	156.0					
445.81 *21*	(11/2-)	20 s *1*	149.7 *2*	100		E3		3.7
5642.6 *8*	16+	> 0.69 ps	810 *1*					
5642.6 *8*	16+	> 0.69 ps	338 *1*					
5642.6 *8*	16+	> 0.69 ps	856.6 *5*	100		E2		0.(
5876.9 *9*	17+	> 0.69 ps	572 *1*					
5876.9 *9*	17+	> 0.69 ps	234.4 *5*			M1		0.1
6170.2 *9*	(18+)	> 0.69 ps	293.3 *5*	100		D		
254.29 *5*	11/2-	34.4 h *3*	254.29 *5*	100		M4		7.9
754.24 *8*	11/2-	57.58 s *32*	754.24 *8*	100		M4		0.(
2088.6 *3*	3/2+,5/2+	> 0.8 ps	1833.2	9 *6*				
2088.6 *3*	3/2+,5/2+	> 0.8 ps	768.8					
2088.6 *3*	3/2+,5/2+	> 0.8 ps	2088.4	100 *10*				
3016.9 *5*	0+	≥ 0.14 ps	3016.3 *12*			E0		
3016.9 *5*	0+	≥ 0.14 ps	1420.7 *5*	100 *15*		E2		1.(
3408.02 *15*	(2+)	≥ 0.062 ps	3408.1 *4*	57 *7*				
3408.02 *15*	(2+)	≥ 0.062 ps	944.0 *3*	41 *7*				
3408.02 *15*	(2+)	≥ 0.062 ps	1811.0 *3*	49 *7*				
3408.02 *15*	(2+)	≥ 0.062 ps	886.42 *22*	100 *11*				
3408.02 *15*	(2+)	≥ 0.062 ps	996.2 *3*	27 *7*				
3539.1 *3*	2+	≥ 0.21 ps	3539.1 *3*	100		E2		1.1
3646.7 *6*	(1,2+)	≥ 0.062 ps	3646.6 *6*	100 *18*				
3646.7 *6*	(1,2+)	≥ 0.062 ps	1743.31 *22*	75 *11*				
3723.54 *17*	(2+)	≥ 0.097 ps	3723.4 *3*	100 *7*		(E2)		1.2
3723.54 *17*	(2+)	≥ 0.097 ps	1311.56 *19*	45 *7*				
1652.91 *4*	3-	> 1.8 ps	1011.7 *1*	100.0		E1		0.(
1652.91 *4*	3-	> 1.8 ps	433.2 *1*	14.94		E1		0.(
2124.91 *8*	5-	> 0.41 ps	381.8 *1*	11.25				
2124.91 *8*	5-	> 0.41 ps	905.6 *1*	100.0		E1		0.(
2124.91 *8*	5-	> 0.41 ps	471 *1*	12.50				
2374.96 *8*	+	> 0.69 ps	631.8 *1*	92.3		M1+E2	<-1.5	0.(
2374.96 *8*	+	> 0.69 ps	1155.7 *1*	100.0		M1+E2	-0.09 *+6-11*	0.(
2576.23 *6*	3+	> 0.69 ps	923.4 *1*	38.71				
2576.23 *6*	3+	> 0.69 ps	297.8 *1*	48.39		M1+E2	1.1 *+6-4*	0.(
2576.23 *6*	3+	> 0.69 ps	531.9 *1*	100.0		M1(+E2)	0.00 *+6-9*	0.(
2576.23 *6*	3+	> 0.69 ps	1039.9 *1*	77.42		M1+E2	-0.8 *+4-7*	0.(
2576.23 *6*	3+	> 0.69 ps	394.0 *1*	61.29		(M1+E2)	0.5 *+5-4*	0.(
2598.27 *10*	2+	> 1.66 ps	2598.0 *2*	85.19		E2		0.(
2598.27 *10*	2+	> 1.66 ps	1062.0 *1*	100.0		M1+E2	-0.26 *+11-7*	0.(
2734.77 *9*	(3,2)+	> 0.37 ps	1081.9 *1*	35.90		(M1+E2)	-0.09 *+12-20*	0.(
2734.77 *9*	(3,2)+	> 0.37 ps	2093.3 *2*	61.54		M1+E2	5.2 *+5-22*	0.(
2734.77 *9*	(3,2)+	> 0.37 ps	622.7 *1*	61.54		(M1+E2)	0.19 *25*	0.(

2734.77 *9*	(3,2)+	> 0.37 ps	1515.4 *2*	100.0	M1+E2	-0.29 *+23-18*	0.(
2773.92 *9*	(3)+	> 0.69 ps	2133.3 *2*	100.0	M1+E2	0.19 *+3-7*	0.(
2773.92 *9*	(3)+	> 0.69 ps	661.5 *1*	30.77	(M1+E2)	0.19 *25*	0.(
2773.92 *9*	(3)+	> 0.69 ps	1553.8 *2*	32.69	M1+E2	-0.9 *+5-10*	0.(
2773.92 *9*	(3)+	> 0.69 ps	1237.6 *1*	28.85	M1+E2	0.40 *+23-18*	0.(
2859.75 *10*	4	> 0.69 ps	1640.9 *2*	28.21			
2859.75 *10*	4	> 0.69 ps	1206.7 *1*	100.0			
2868.97 *10*	(4)+	> 0.46 ps	2228.3 *2*	66.67			
2868.97 *10*	(4)+	> 0.46 ps	1649.4 *2*	89.74	M1+E2	-0.4 *+3-4*	0.(
2868.97 *10*	(4)+	> 0.46 ps	1216.1 *1*	100.0			
2935.14 *21*	(2,3,4)	> 0.48 ps	2292.7 *2*	100.0			
2935.14 *21*	(2,3,4)	> 0.48 ps	1398.8 *2*				
3009.90 *20*		> 0.69 ps	2368.6 *2*	100.0			
3051.79 *15*	(3)+	> 0.69 ps	1398.8 *1*	100.0			
3051.79 *15*	(3)+	> 0.69 ps	2410.3 *2*	17.39	M1(+E2)	0.09 *14*	0.(
3051.79 *15*	(3)+	> 0.69 ps	864.6 *2*				
3051.79 *15*	(3)+	> 0.69 ps	1832.6 *2*	33.33	M1+E2	<-0.6	0.(
3109.79 *15*		> 0.69 ps	1890.3 *2*	100.0			
3109.79 *15*		> 0.69 ps	2468.6 *2*	42.86			
3125.71 *20*	(1,2,3)	> 0.65 ps	2484.4 *2*	100.0			
3155.36 *15*		> 0.69 ps	1619.1 *2*	100.0			
3155.36 *15*		> 0.69 ps	1935.9 *2*	100.0			
3180.37 *15*	1	> 0.69 ps	2539.4 *3*	100			
3180.37 *15*	1	> 0.69 ps	439.0 *5*	13			
3180.37 *15*	1	> 0.69 ps	1644.3 7	63			
3180.37 *15*	1	> 0.69 ps	3180.2 *2*	75			
3180.37 *15*	1	> 0.69 ps	453.7 *5*	25			
3218.21 *20*		> 0.69 ps	2576.9 *2*	100.0			
3300.74 *21*		> 0.69 ps	1764.4 *2*	100			
152.4 *3*	(11/2-)	5.73 s *20*	64.8 *3*	100	E3		
192.12 *14*	(11/2-)	1.1 s *2*	130.4 *2*	100	E3		7.(
1126.83 *10*	3/2+	> 188 fs	1126.50 *21*	100.00 *10*	M1+E2	+0.47 *6*	0.(
1126.83 *10*	3/2+	> 188 fs	981.1 *3*	2.77 *10*	(E2)		2.2
1657.07 *16*	1/2+	> 0.67 ps	358.17 *23*	16.6 *8*			
1657.07 *16*	1/2+	> 0.67 ps	1657.5 *3*	93.9 *17*	(E2)		9.1
1657.07 *16*	1/2+	> 0.67 ps	530.03 *21*	100.0 *17*	E2		0.(
1767.36 *13*	13/2+	> 0.37 ps	273.38 *21*	23.1 *9*	M1+E2	+0.08 *6*	0.(
1767.36 *13*	13/2+	> 0.37 ps	649.62 *21*	100.0 *9*	E1		2.1
1767.36 *13*	13/2+	> 0.37 ps	310.3 *3*	3.4 *1*	(E2)		0.(
1986.08 *16*	(13/2+)	> 0.42 ps	868.4 *3*	100.0 *13*	(E1)		1.1
1986.08 *16*	(13/2+)	> 0.42 ps	465.41 *25*	14.9 *10*	(E2)		0.(
1986.08 *16*	(13/2+)	> 0.42 ps	218.67 *22*	7.5 *10*	(E2+M1)		0.1
2108.20 *23*	15/2(+)	> 28 fs	340.9 *5*	42.9 *20*	(E2+M1)		0.(
2108.20 *23*	15/2(+)	> 28 fs	311.9 *4*	100 *4*	(E2+M1)		0.(
2108.20 *23*	15/2(+)	> 28 fs	122.3 *3*	18.4 *20*			
2126.10 *15*	(11/2+)	> 114 fs	1008.8 *3*	100 *6*	(E1)		8.7
2126.10 *15*	(11/2+)	> 114 fs	604.9 *3*	41 *5*	(E2+M1)		0.(
2126.10 *15*	(11/2+)	> 114 fs	669	92	(E2+M1)		0.(
2126.10 *15*	(11/2+)	> 114 fs	272.28 *22*	68 *9*	(E2+M1)		0.(
2126.10 *15*	(11/2+)	> 114 fs	1981.4 *5*	32 *4*	(E2)		8.1
2126.10 *15*	(11/2+)	> 114 fs	631.8 *3*	43 *4*	(E2+M1)		0.(
2190.36 *20*	(1/2-)	> 215 fs	2044.7 7	7 *3*	(E3)		1.1
2190.36 *20*	(1/2-)	> 215 fs	897.6 *2*				
2190.36 *20*	(1/2-)	> 215 fs	2190.8 *5*	100 *3*	(M2)		1.1
2267.20 *18*	(1/2+)	> 184 fs	291.65 *25*	6 *5*	(E2+M1)		0.(
2267.20 *18*	(1/2+)	> 184 fs	2267.1 *3*	100 *5*	(E2)		8.5
2267.20 *18*	(1/2+)	> 184 fs	975.0 *3*				
2336.54 *21*	(15/2-)	> 28 fs	816.03 *25*	80 *11*	(E3)		0.(
2336.54 *21*	(15/2-)	> 28 fs	1218.3 *3*	100 *11*	(E2)		1.4
2454.20 *22*	(15/2+)	> 94 fs	687.32 *23*	100 *5*	(E2+M1)	-0.26 *+14-15*	0.(

2454.20 *22*	(15/2+)	> 94 fs	449.91 *22*	64 *5*	(E2)			0.(
2473.2 *3*	(1/2-,9/2-)	> 14 fs	368.16 *21*	100	(E2)			0.(
2580.71 *16*	(11/2+)	> 13 fs	2435.30 *25*	100 *19*	(E2)			8.(
2580.71 *16*	(11/2+)	> 13 fs	536.0 *3*	50 *8*	(E2+M1)			0.(
2580.71 *16*	(11/2+)	> 13 fs	1122.9 *4*	94 *17*	(E2+M1)			0.(
2580.71 *16*	(11/2+)	> 13 fs	726.7 *3*	33 *8*	(E2+M1)			0.(
2659.6 *8*	(11/2+)	> 156 fs	2514.1 *8*	100	(E2)			8.(
2718.5 *4*	(9/2,11/2)	> 159 fs	1601.1 *5*	47 *4*				
2718.5 *4*	(9/2,11/2)	> 159 fs	1197.5 *4*	100 *5*				
2739.7 *4*	(1/2-,9/2-)	> 87 fs	1159.6 *3*	100	E2			1.(
2782.7 *3*	(13/2+)	> 51 fs	576.93 *25*	49 *22*	(E2+M1)			0.(
2782.7 *3*	(13/2+)	> 51 fs	1261.1 *5*	100 *22*	(E2)			1.(
2810.70 *22*	(1/2+)	> 76 fs	2810.95 *23*	100 *13*	(E2)			9.(
2810.70 *22*	(1/2+)	> 76 fs	1201.1 *5*	85 *13*	(E2+M1)			0.(
2847.5 *3*	(9/2+)	> 97 fs	1389.9 *6*	42 *8*	(E2+M1)			0.(
2847.5 *3*	(9/2+)	> 97 fs	2848.4 *11*	53 *17*	(E2)			9.(
2847.5 *3*	(9/2+)	> 97 fs	1354.0 *5*	50 *8*	(E2+M1)			0.(
2847.5 *3*	(9/2+)	> 97 fs	2702.8 *12*	33 *6*	(E2+M1)			0.(
2847.5 *3*	(9/2+)	> 97 fs	1005.0 *4*	100 *11*	(E2+M1)			0.(
2881.6 *4*	(7/2+)	> 55 fs	1428.5 *6*	81 *19*	(E2+M1)			0.(
2881.6 *4*	(7/2+)	> 55 fs	2882.3 *11*	81 *15*	(E2+M1)			0.(
2881.6 *4*	(7/2+)	> 55 fs	1424.5 *8*	100 *50*	(E2+M1)			0.(
2881.6 *4*	(7/2+)	> 55 fs	2737.0 *16*	31 *15*	(E2+M1)			0.(
2881.6 *4*	(7/2+)	> 55 fs	1028.0 *5*	92 *42*				
2887.47 *25*	(7/2+,9/2,11/2+)	> 24 fs	1075.2 *5*	86 *21*				
2887.47 *25*	(7/2+,9/2,11/2+)	> 24 fs	1392.8 *5*	82 *21*				
2887.47 *25*	(7/2+,9/2,11/2+)	> 24 fs	2742.5 *17*	32 *11*				
2887.47 *25*	(7/2+,9/2,11/2+)	> 24 fs	1367.0 *4*	100 *21*				
2887.47 *25*	(7/2+,9/2,11/2+)	> 24 fs	1769.6 *6*	61 *36*				
3.694 *3*	5-	14.6 m *5*	3.683 *4*		M3			1.(
59.03 *3*	3-	7.2 m *3*	59.03 *3*	100	M3			
76.80 *20*	4-	2.01 m *7*	76.8 *2*	100	M3			354
35.10 *10*	(7/2+)	> 10 µs	35.1 *1*	100	[M2]			264
127.97 *12*	(1/2+)	≈ 70 s	127.9 *6*	100	M3			38.(
519.43 *20*	11/2-	1.60 s *15*	233.5 *2*	100	E3			0.(
231.16 *5*	11/2-	5.50 h *20*	231.15 *5*	100	M4			14.(
756.51 *5*	11/2-	62.0 s *8*	756.51 *5*	100	M4			0.(
2585.550 *20*	1(+)	> 0.17 ps	1009.768 *18*	100 *6*	D+Q			
2585.550 *20*	1(+)	> 0.17 ps	2585.49 *8*	21 *3*				
2109.79 *3*	4+	> 0.2 ps	1413.40 *9*	100 *1*	E2			0.(
2109.79 *3*	4+	> 0.2 ps	794.96 *3*	3.1 *10*	M1+E2	-0.5 *+8-5*		0.(
2218.31 *5*	6+	> 0.7 ps	426.89 *4*	100	M1+E2	-0.22 *+17-9*		0.(
2295.41 *3*	4+	> 0.27 ps	1598.90 *6*	16.5 *6*	E2			
2295.41 *3*	4+	> 0.27 ps	734.94 *16*	7.4 *10*	E2			0.(
2295.41 *3*	4+	> 0.27 ps	980.74 *5*	100.0 *14*	M1+E2	-0.47 *11*		0.(
2295.41 *3*	4+	> 0.27 ps	784.55 *3*	15.8 *3*	E1			0.(
2420.21 *7*	5+	> 0.7 ps	628.62 *6*	27.2 *11*	M1+E2	-1.0 *8*		
2420.21 *7*	5+	> 0.7 ps	310.75 *16*	66.8 *19*	M1+E2	-0.03 *6*		0.(
2420.21 *7*	5+	> 0.7 ps	202.67 *18*	100.0 *20*	M1+E2	-0.06 *+12-10*		0.(
2655.097 *24*	(3+)	> 0.7 ps	1340.42 *2*	100	M1+E2			0.(
2692.97 *4*	2+	> 0.12 ps	1996.4 *3*	7.7 *19*	M1+E2			
2692.97 *4*	2+	> 0.12 ps	1131.81 *8*	28.8 *19*	M1+E2			0.(
2692.97 *4*	2+	> 0.12 ps	1378.31 *7*	100 *4*	E2			0.(
2692.97 *4*	2+	> 0.12 ps	2693.13 *7*	32.7 *19*	E2			
2692.97 *4*	2+	> 0.12 ps	1182.06 *7*	23 *6*	E1			0.(
2715.79 *7*	(5,6)	> 0.7 ps	1401.02 *10*	100 *4*				
2715.79 *7*	(5,6)	> 0.7 ps	924.39 *9*	40 *4*				
2808.83 *9*	6+	> 44 fs	1494.19 *9*	100 *4*	E2			0.(
2808.83 *9*	6+	> 44 fs	1017.09 *23*	85 *4*	M1+E2	+3.11 *+20-14*		0.(
2834.58 *4*	(4+)	> 0.7 ps	1323.94 *11*	64 *6*	(E1+M2)			0.(

2834.58 *4*	(4+)	> 0.7 ps	724.63 *5*	36 *4*	(M1+E2)		0.(
2834.58 *4*	(4+)	> 0.7 ps	539.20 *3*	100 *10*	(M1+E2)		0.(
2868.26 *5*	(3,2+)	> 0.14 ps	2171.70 *14*	22.2 *14*			
2868.26 *5*	(3,2+)	> 0.14 ps	1553.74 *19*	16.7 *14*			
2868.26 *5*	(3,2+)	> 0.14 ps	1357.37 *4*	100.0 *14*	D+Q	-0.9 *3*	
2887.98 *6*	(5,4)	> 0.7 ps	1573.04 *8*	100 *9*	D+Q	-1.4 *+9-4*	
2887.98 *6*	(5,4)	> 0.7 ps	794.96 *8*	35 *4*			
2901.34 *3*	2+	> 0.06 ps	2901.83 *8*	24 *3*	E2		
2901.34 *3*	2+	> 0.06 ps	1389.9 *3*	100 *3*			0.(
2901.34 *3*	2+	> 0.06 ps	2205.1 *3*	35 *3*	M1+E2	+1.1 *+9-20*	
2901.34 *3*	2+	> 0.06 ps	1340.32 *3*	65 *8*			0.(
2901.34 *3*	2+	> 0.06 ps	1586.41 *14*	19 *3*			
2901.34 *3*	2+	> 0.06 ps	722.70 *9*	27 *3*	M1+E2	+1.3 *+13-10*	0.(
2950.98 *6*	3(+)	> 58 fs	877.94	22.9 *21*	(M1+E2)	-0.8 *8*	0.(
2950.98 *6*	3(+)	> 58 fs	841.08 *6*	100.0 *21*	(M1+E2)	+1.3 *13*	0.(
2950.98 *6*	3(+)	> 58 fs	2254.71 *10*	85.4 *21*	(M1+E2)	-2.1 *+12-9*	
1349	(5-)	> 1 µs	1113	≈14			
1349	(5-)	> 1 µs	870	100			
129.7 *7*	(11/2-)	< 8.8 s	45.2 *7*	100	[E3]		
2530.75 *17*		> 2 µs	1020.3 *3*	11.6 *5*			
2530.75 *17*		> 2 µs	639.0 *1*	100 *2*			
2574.4 *4*		≥ 2 µs	44.0 *2*	100			
137.9 *3*	5-,6-	41.29 d *11*	62.2 *5*		E4		1.2
150.3 *1*	1(+)	< 5 s	150.3 *1*	100	M3		20.5
121+X		> 16 µs	121				
457.38 *23*	11/2-	10.7 s *6*	190.1 *2*	100	E3		1.5
5934.6 *15*	(39/2)	> 0.7 ps	1005.0	100 *30*			
5934.6 *15*	(39/2)	> 0.7 ps	491.3	44 *12*			
175.9 *3*	11/2-	22.6 m *2*	174.2 *3*	100	M4		68.2
753.99 *16*	11/2-	66 s *2*	754.0 *2*	100	(M4)		0.1
2190.891 *25*	4+	> 0.14 ps	380.66 *7*	100.0 *13*	E1		0.(
2190.891 *25*	4+	> 0.14 ps	530.76 *5*	58.7 *7*	E2		0.(
2477.651 *23*	0+	> 1.2 ps	2477.8 *20*	0	(E0)		
2477.651 *23*	0+	> 1.2 ps	817.62 *2*	100			
2587.78 *3*	4+	> 0.12 ps	777.59 *2*	22.6 *5*			
2587.78 *3*	4+	> 0.12 ps	396.91 *7*	100.0 *9*			
2707.04 *11*	(5+)	> 36 fs	383.44 *7*	100			
2822.52 *4*	0+	> 0.76 ps	1162.49 *3*	100			0.(
2825.71 *3*	(5-)	> 0.51 ps	1015.53 *1*	100			
3079.34 *15*	(5,6+,7)	> 7 ps	372.3 *1*	100			
3124.07 *7*	7-	> 55 fs	800.42 *7*	100	E1		0.(
3266.19 *8*	(4+,6)	> 15 fs	440.48 *7*	100			
3308.27 *10*	(6+)	> 38 fs	482.56 *9*	100			
3343.57 *5*	(3,4,5,6)	> 190 fs	755.79 *4*	100			
1682.07 *12*	4-	> 596 fs	1315.49 *5*	100			
1754.98 *4*	0+	> 277 fs	791.67 *7*	100 *5*			
1754.98 *4*	0+	> 277 fs	462.16 *6*				
1754.98 *4*	0+	> 277 fs	944.8 *10*	6.3 *20*			
1177.812 *21*	2+	> 2.4 ps	1095.86 *3*	100 *2*	E2+M1	+6E+1 *+13-3*	
1177.812 *21*	2+	> 2.4 ps	910.96 *3*	75 *6*	E2		
1177.812 *21*	2+	> 2.4 ps	1177.79 *4*	65.8 *14*	E2		
75.89 *5*	2+	> 2 ns	75.88 *5*	100	E2		6.5
96.45 *7*	11/2-	2.7 s *3*	96.4 *1*	100	E3		46.1
147.86 *10*	8-	96 m *1*	39.75 *10*		E3		7.4
145.3 *3*	8-	46.3 m *4*	8.6		[E3]		≈5.6
377.76 *9*	11/2-	24.5 s *5*	119.6 *1*	100	E3		15.9
6620.8 *6*	18-	> 1.0 ps	333.8 *2*	100.0	M1+E2		0.(
7071.3 *7*	19-	> 1.0 ps	450.5 *4*	100.0	M1+E2		0.(
7455.3 *8*	(20-)	> 1.4 ps	384.0 *4*	100.0	(M1+E2)		0.(
749.1 *2*	11/2-	85 s *3*	721.8 *1*	100	M4		0.1

1319.658 *2*	2-	> 3.9 ps	190.215 *3*	0.21 *2*	E1		0.(
1319.658 *2*	2-	> 3.9 ps	1230.6857 *3*	100	E1		8.1
1468.506 *2*	4-	> 3.5 ps	1180.3119 *15*	100 *8*	E1		8.5
1468.506 *2*	4-	> 3.5 ps	148.846 *2*	0.42 *2*	E2		0.(
1468.506 *2*	4-	> 3.5 ps	192.371 *4*	0.43 *3*			
1468.506 *2*	4-	> 3.5 ps	170.678 *4*	0.14 *2*			
1743.147 *14*	0+	> 0.75 ps	1663.77 *20*	100 *10*	[E2]		1.1
1743.147 *14*	0+	> 0.75 ps	479.632 *14*	28.3 *17*	E1		0.(
1743.147 *14*	0+	> 0.75 ps	225.659 *7*	0.66 *7*			
1057.426 *19*	3+	> 1525 fs	982.16 *2*	100 *1*	M1+E2	+47 *+18-10*	0.(
1057.426 *19*	3+	> 1525 fs	808.94 *3*	20.6 *2*	M1+E2	-11.7 *+16-23*	0.(
1376.73 *3*	2-	> 381 fs	1301.46 *3*	100 *1*	E1(+M2)	-0.08 *+5-4*	0.(
1376.73 *3*	2-	> 381 fs	1128.3 *10*	≤1			
1376.73 *3*	2-	> 381 fs	319.2 *6*	1.8 *1*	E1		0.(
1379.54 *4*	0+	> 936 fs	1304.27 *4*	100	E2		1.(
1436.27 *3*	2+	> 236 fs	1187.76 *4*	100 *1*	E2		0.(
1436.27 *3*	2+	> 236 fs	1436.16 *7*	13.5 *2*	E2		1.1
1436.27 *3*	2+	> 236 fs	288.21 *25*	8.4 *12*	[E2]		0.(
1436.27 *3*	2+	> 236 fs	1361.06 *5*	36.4 *4*	M1+E2		0.(
1498.85 *5*	4-	> 277 fs	1250.34 *4*	100 *3*	E1(+M2)	+0.05 *6*	0.(
1498.85 *5*	4-	> 277 fs	441.51 *22*	7.8 *12*	[E1]		0.(
1558.35 *8*	0+	> 409 fs	1483.08 *8*	100	E2		1.1
1561.45 *5*	4+	> 222 fs	1312.99 *7*	74.8 *3*	M1+E2	+0.28 *+34-12*	0.(
1561.45 *5*	4+	> 222 fs	1046.62 *5*	100 *1*	[E2]		0.(
1586.56 *4*	2+	> 347 fs	1511.40 *7*	33.0 *15*	M1+E2	-0.24 *5*	0.(
1586.56 *4*	2+	> 347 fs	1586.50 *5*	100 *4*	[E2]		1.2
1804.97 *6*	2+	> 208 fs	1729.2 *4*	20 *4*	[M1,E2]		0.(
1804.97 *6*	2+	> 208 fs	734.50 *13*	44.3 *14*	E2		0.(
1804.97 *6*	2+	> 208 fs	816.43 *7*	100 *2*	M1+E2	-1.8 *+9-8*	0.(
1804.97 *6*	2+	> 208 fs	1805.51 *25*	33 *4*	E2		1.(
1804.97 *6*	2+	> 208 fs	747.8 *3*	25 *4*	[M1]		0.(
396.9 *5*	(6-)	4.25 s *15*	113.0 *3*	100	E3		22.7
99.53 *5*	(11/2-)	25 s *3*	27.1 *1*		E3		8.7
501.74 *19*	8+	4.2 m *1*	159.59 *10*		E3		4.(
88.4	(0+)	5.3 h *2*	88.4	100	E3		86.2
110.3 *12*	0-	10.70 s *17*	110.3 *12*	100	M3		108 (
750.5 *4*	(11/2-)	55.2 s *5*	678.4 *3*	100	(M4)		0.2
10520.6 *14*	71/2-	≥ 1.0 ps	896.2 *5*	100	[E2]		0.(
11450.6 *18*	75/2-	≥ 1.0 ps	930 *1*	100	[E2]		0.(
1607.99 *9*	(2)+	> 0.18 ps	1608.3 *3*	26 *8*	[E2]		0.(
1607.99 *9*	(2)+	> 0.18 ps	1509.04 *9*	100 *11*	[M1,E2]		0.(
108.1562 *13*	1/2-	1.257 m *6*	108.159 *3*	100	E3		31.(
52.37	1-	9.5 s *15*	52.37	100	M3		4.1
67.20 *1*	2-	28 m *2*	67.200 *10*	100	E3		477
205.91 *5*	1/2+	8.30 s *8*	205.92 *5*	100 *10*	E3		1.1
205.91 *5*	1/2+	8.30 s *8*	40.0 *1*	6.8E-4 *8*	[M3]		2.1
59.98 *3*	2-	5.02 h *5*	59.98 *3*	100	E3(+M4)	<0.017	930 1
169.56+X	(9+)	3.2 s *2*	X				
211.15 *3*	1/2+	6.76 s *7*	211.15 *3*	100	E3		1.2
105.87 *6*	6-	67.0 m *7*	9.80 *5*	100	E3		
297.88 *7*	1/2+	1.09 s *3*	297.88 *10*	100	E3		0.2
1505.2	(17/2+)	≥ 15 ns	973.1	100			
139.78 *7*	6-	36.6 m *3*	45.79 *6*	100	E3		4.5
≈59	(6+)	132 s *4*	≈59	100	(M3)		2.4
143.43 *17*	(1)-	> 4 μs	143.5 *2*	100	M2		6.5
741.69 *23*	(11/2-)	9.6 s *6*	630.5 *2*	100	M4		0.1
1623.24 *10*	3-	> 0.31 ns	1293.42 *15*	80 *9*	[E1]		
1623.24 *10*	3-	> 0.31 ns	1622.1 *10*	15 *5*	[E3]		0.(
1623.24 *10*	3-	> 0.31 ns	1521.32 *15*	100 *8*	[E1]		
3263.09 *18*	16+	> 0.30 ps	560.50 *11*	100 *10*	E2		0.(

3263.09 *18*	16+	> 0.30 ps	388.4 *3*	22 *7*	(E2)		
1713.4 *7*	0+	> 0.97 ps	927.4	12.4 *6*			
1713.4 *7*	0+	> 0.97 ps	1632.9	100.0 *6*	[E2]		
207.801 *5*	1/2-	2.269 s *6*	207.801 *5*	100	E3		1.3
1411.0959 *18*	4+	> 0.83 ps	134.824 *1*	5.8 *13*			
1411.0959 *18*	4+	> 0.83 ps	862.355 *11*	81 *4*	E2		0.(
1411.0959 *18*	4+	> 0.83 ps	416.352 *4*	14.1 *11*	M1+E2	1.7 *+11-5*	0.(
1411.0959 *18*	4+	> 0.83 ps	1331.324 *15*	100 *8*	E2		0.(
1411.0959 *18*	4+	> 0.83 ps	589.913 *8*	3.2 *5*	E2		0.(
1411.0959 *18*	4+	> 0.83 ps	293.523 *2*	1.05 *21*	M1+E2	1.4 *+14-5*	0.(
1411.0959 *18*	4+	> 0.83 ps	1146.998 *9*	67 *4*	M1		0.(
1411.0959 *18*	4+	> 0.83 ps	515.303 *2*	19.7 *23*	E2		0.(
1616.8060 *19*	6+	> 1.7 ps	205.710 *1*	27 *4*	E2		0.2
1616.8060 *19*	6+	> 1.7 ps	1068.079 *13*	100 *16*	M1		0.(
1616.8060 *19*	6+	> 1.7 ps	499.233 *3*	15.2 *18*	M1+E2	1.0 *+9-5*	0.(
1616.8060 *19*	6+	> 1.7 ps	688.538 *20*	8.0 *23*	[E2]		
1616.8060 *19*	6+	> 1.7 ps	352.900 *3*	7.7 *9*	M1+E2		0.(
1616.8060 *19*	6+	> 1.7 ps	1352.53 *13*	≈38	E2		0.(
1616.8060 *19*	6+	> 1.7 ps	622.059 *5*	7.0 *9*	E2		0.(
70 *20*	5	74.5 s *15*	28.85	100			
X	5+	24.3 s *17*	<125	100	[E3]		
58.1	(3/2-,5/2,7/2-)	> 10 ns	58				
58.1	(3/2-,5/2,7/2-)	> 10 ns	4.2				
24.1999 *16*	1/2-	46 s *2*	24.20 *2*	100	E3		2.5
1049.8 *6*	8-	11.4 s *3*	95.92 *9*	100	E1		0.1
331.5 *3*	1/2-	6.41 s *2*	227.0 *2*	100	M3		6.9
2502.5 *4*	(23/2-)	> 0.1 µs	355.4 *3*	100 *7*	[E2]		0.(
2502.5 *4*	(23/2-)	> 0.1 µs	291.0 *3*	14 *4*	[E1]		0.(
2502.5 *4*	(23/2-)	> 0.1 µs	21				
4996.50+X *28*	(47/2-)	> 0.19 ps	674.1 *1*	100 *8*	Q		
4996.50+X *28*	(47/2-)	> 0.19 ps	351.2 *3*	68 *10*	D		
5740.6+X *4*	(51/2-)	> 0.13 ps	743.9 *3*	100 *15*	Q		
5740.6+X *4*	(51/2-)	> 0.13 ps	377.0 *5*	51 *13*	D		
34.37 *22*	3(-)	1.41 m *10*	34.37 *22*	100	(M3)		8.(
202.81 *12*	3+	6.7 m *4*	202.81 *12*	100	[E3]		1.8
29.0 *5*	1/2-	160 s *10*	29.0 *5*	100	E3		9.4
71.13 *8*	1/2-	79 s *2*	71.10 *9*	100	E3		475
41.86 *4*	1-	3.7 m *5*	41.86 *4*	100	M3		2.5
170.83 *5*	(6)-	142 d *2*	59.08 *2*	100 *4*	M3		
170.83 *5*	(6)-	142 d *2*	126.2	53 *38*	[E4]		266
970.1757 *24*	23/2-	160.4 d *3*	125.3 *2*	0.032 *8*	[M3]		94.1
970.1757 *24*	23/2-	160.4 d *3*	334	≤0.28	[M4]		5.5
970.1757 *24*	23/2-	160.4 d *3*	115.8682 *23*	100 *2*	E3		30.7
970.1757 *24*	23/2-	160.4 d *3*	333.1 *2*	0.26 *6*	[E4]		1.(
624.0 *5*	(9-)	≥ 1 ms	128.0	100	E1		0.1
21.93 *9*	1/2(-)	29.5 s *9*	21.93 *9*	100	[E3]		5.4
7455.2 *17*	(57/2-)	> 7 ns	661				
7455.2 *17*	(57/2-)	> 7 ns	945				
1315.4502 *8*	23/2+	1.09 s *5*	55.15 *2*	5.45 *6*	[E1]		0.1
1315.4502 *8*	23/2+	1.09 s *5*	14.050 *10*	0.41 *1*	[M1+E2]		217
1315.4502 *8*	23/2+	1.09 s *5*	228.4838 *6*	100.0 *21*	E2		0.1
2740.02 *15*	37/2-	51.4 m *5*	214.0 *1*	100	E3		1.5
1147.416 *6*	8-	4.0 s *2*	88.8667 *10*	100	E1		0.4
2446.09 *8*	16+	31 y *1*	309.50 *15*	100	M4(+E5)	0.12 *10*	8.4
2446.09 *8*	16+	31 y *1*	12.7 *2*	7.2E-6	[E3]		1.4
2446.09 *8*	16+	31 y *1*	587.0 *1*	41 *3*	E5		0.2
375.0352 *25*	1/2-	18.67 s *4*	≈375	≈0.2	[M4]		3.5
375.0352 *25*	1/2-	18.67 s *4*	160.696 *2*	100	M3		34.1
1105.74 *16*	25/2-	25.05 d *25*	257.37 *15*	100 *17*	E3		0.(
1105.74 *16*	25/2-	25.05 d *25*	21.01 *12*	0.254 *13*	M2		1.1

1141.552 *15*	8-	5.53 h *2*	57.538 *17*	100.0 *20*	E1		0.2
1141.552 *15*	8-	5.53 h *2*	500.697 *15*	29.6 *8*	M2+E3	-5.3 *2*	0.(
2537.4 *10*	(14+)	> 10 µs	52	100	[E2]		58.3
1172.87 *18*	(8-)	61.5 m *15*	506.60 *8*	100 *8*	[M2,E3]		0.3
1172.87 *18*	(8-)	61.5 m *15*	50.80 *8*	56 *7*	(E1)		0.4
1272.2 *4*	(8-)	48 s *10*	72.7 *2*	78 *17*	[E1]		0.8
1272.2 *4*	(8-)	48 s *10*	555.0 *2*	100 *25*	[M2]		0.3
2571.0 *3*	(33/2-)	> 0.69 ps	570.1 *2*	100	(E2)		0.(
519.577 *16*	10-	15.84 m *10*	184.951 *15*	100 *6*	E3		3.2
519.577 *16*	10-	15.84 m *10*	356.47 *10*	1.19 *13*	M4		4.7
347.9 *3*	(7+)	17 s *2*	161.1 *2*		(E3)		
1778.1 *10*	(25/2-)	7.3 s *9*	191.7 *5*		(E2)		
1834.2 *4*	7(-)	> 3.1 ps	297.7 *2*	43.3 *23*	(E2)		0.(
1834.2 *4*	7(-)	> 3.1 ps	234.3 *10*	18.1 *25*	D		
1834.2 *4*	7(-)	> 3.1 ps	792.2 *2*	100 *5*	D		
2581.6 *9*	(10+)	> 104 ps	981.3 *10*	69 *20*			
2581.6 *9*	(10+)	> 104 ps	379.4 *10*	100 *37*			
1672.0 *5*		≥ 187 ns	965.3 *7*	≈100			
221.91 *3*	1/2-	6.40 m *7*	101.6 *5*	0.0088 *8*	[E4]		1.3
221.91 *3*	1/2-	6.40 m *7*	221.93 *5*	100 *8*	M3		10.3
309.492 *4*	11/2+	5.30 s *8*	102.481 *3*	100	M2		39.2
1431.02 *5*	2+	> 5 ps	424.36 *15*	8.3 *19*			
1431.02 *5*	2+	> 5 ps	1430.97 *6*	79 *6*	E2		0.(
1431.02 *5*	2+	> 5 ps	1319.84 *6*	100 *6*	M1+E2+E0		
197.383 *23*	11/2+	1.67 m *3*	9.53 *6*		[E3]		4.(
197.383 *23*	11/2+	1.67 m *3*	131.55 *2*	100 *3*	E3		19.8
197.383 *23*	11/2+	1.67 m *3*	23.54 *5*	0.018 *6*	[M2]		8.7
3542.8 *21*	(16+)	7.5 s *+48-35*	399				
3542.8 *21*	(16+)	7.5 s *+48-35*	180				
188.0463 *17*	8(+)	169 d *8*	83.3067 *8*	100 *4*	M4		1.3
188.0463 *17*	8(+)	169 d *8*	188.0462 *17*	3.6	(E5)		246
148.2 *5*	(8+)	$2.0\times10^{+5}$ y	48.84 *50*	100	(E5)		4.8
589.143 *16*	3/2+	> 1.4 ps	77.37 *5*	5.8 *13*	M1		10.7
589.143 *16*	3/2+	> 1.4 ps	589.06 *5*	100 *1*	M1(+E2)		0.(
589.143 *16*	3/2+	> 1.4 ps	454.92 *2*	24.1 *11*	E2		0.(
172.0848 *24*	6-	18.59 m *4*	15.93 *10*	100	M3		1.9
172.0848 *24*	6-	18.59 m *4*	2.636 *3*	0.0019 *7*	(M3)		1.6
204 *10*	(6-)	3.1 h *2*	85		[M3]		8.(
267 *10*		61 s *+40-20*	267 *10*	100			
141.2 *2*	(9/2+)	> 28 ns	49.6 *2*	100	E1		0.5
49.20 *14*	7/2-	2.7 m *1*	49.2		[M3]		
170.73 *7*	1/2-	9.9 h *3*	170.7 *1*	100	M4		208
3440.4 *6*	(14+)	≥ 0.92 ps	148.5	0.83 *3*			
3440.4 *6*	(14+)	≥ 0.92 ps	658.5 *5*	100 *3*	(E2)		0.(
3440.4 *6*	(14+)	≥ 0.92 ps	401.1	3.1 *2*	(E2)		0.(
30.82 *2*	9/2-	5.81 h *10*	30.81 *4*	100	M3+E4	0.04 *2*	3.3
427.93 *4*	5/2-,7/2-	> 4.4 ps	397.0 *1*	100 *10*			
427.93 *4*	5/2-,7/2-	> 4.4 ps	211.26 *5*	13 *2*	E2(+M1)	>1	0.3
427.93 *4*	5/2-,7/2-	> 4.4 ps	428.5 *5*	46 *10*			
427.93 *4*	5/2-,7/2-	> 4.4 ps	152.03 *5*	25 *2*			
531.55 *3*	5/2-	> 0.26 ps	531.44 *10*	100 *10*			
531.55 *3*	5/2-	> 0.26 ps	297.83 *9*	32 *6*			
531.55 *3*	5/2-	> 0.26 ps	314.91 *4*	19 *1*			
531.55 *3*	5/2-	> 0.26 ps	312.17 *4*	8 *3*			
550.04 *3*	3/2-	> 0.039 ps	454.75 *3*	100 *7*			
550.04 *3*	3/2-	> 0.039 ps	550.0 *3*	24 *2*	M1		0.(
550.04 *3*	3/2-	> 0.039 ps	316.52 *6*	1.5 *1*			
550.04 *3*	3/2-	> 0.039 ps	480.53 *5*	42 *3*			
550.04 *3*	3/2-	> 0.039 ps	273.6 *5*	5 *1*	[M1]		0.3
1705.7 *1*	10-	9.86 m *3*	38.9 *1*	100	M2+E3	0.10 *2*	1.2

74.382 *3*	3/2-	13.10 h *5*	74.379 *9*	100	M3+E4	0.055 *3*	*40*
2015.40 *11*	(10-)	5.9 s *1*	47.4 *2*	0.0031 *6*	[E3]		7.5
2015.40 *11*	(10-)	5.9 s *1*	307.02 *9*	13.3 *10*	(M2)		0.9
2015.40 *11*	(10-)	5.9 s *1*	302.48 *6*	100 *6*	(E3)		0.4
3103.8 *15*	(12+)	≥ 2.1 ps	685	100	(E2)		0.0
180.9 *4*	5/2+	> 100 ns	180.8 *5*	100	[E1]		0.0
140.50+Y *10*	(8-)	≥ 4 ns	140.5 *1*	100	E1(+M2)	-0.07 *7*	0.2
432.49 *11*	(2)+	> 10 ns	169.8 *1*	100 *11*	[E1]		0.1
432.49 *11*	(2)+	> 10 ns	139.1 *1*	97 *9*	M1(+E2)	<0.8	2.1
432.49 *11*	(2)+	> 10 ns	206.9 *1*	40 *3*	[M1,E2]		0.5
432.49 *11*	(2)+	> 10 ns	89.8 *1*	11 *3*	[M1+E2]		7.8
X+0.0	2-	1.90 h *5*	≤1.5		[E3]		
26.1 *1*	(1)-	1.120 h *3*	26.1 *1*	100	M3		9.9
36.154 *25*	4+	> 2 μs	36.175 *17*	100	E1		1.2
376.4 *1*	11-	3.087 h *12*	148.7 *1*	100	M4		475
171.29 *4*	11/2-	4.899 s *23*	41.89 *4*	100	E3		1.6
624.07 *4*	(1/2+)	> 5 ps	624.06 *6*	100 *3*	(M1+E2)	0.40 *22*	0.0
624.07 *4*	(1/2+)	> 5 ps	445.13 *8*	4.00 *27*	[M1,E2]		0.0
624.07 *4*	(1/2+)	> 5 ps	541.64 *10*	25 *3*	(M1)		0.0
624.07 *4*	(1/2+)	> 5 ps	85.15 *8*	4.1 *5*	[M1,E2]		9.4
624.07 *4*	(1/2+)	> 5 ps	494.69 *7*	4.11 *22*	(E2)		0.0
56.720 *5*	1-	1.45 m *5*	56.71 *3*	100	E3		2.8
118.7824 *18*	3-	> 15 ns	34.520 *10*	4.3 *3*	M1		24.1
118.7824 *18*	3-	> 15 ns	118.7817 *18*	100 *12*	E1		0.2
168.14 *12*	(11-)	241 y *9*	155.16 *12*	100	(E5)		
80.238 *6*	11/2-	10.53 d *4*	80.234 *7*	100	M4		2.1
100 *5*	11/2-	3.67 h *8*	100 *5*		(M4)		5.0
116.65 *8*	(7/2)-	> 300 ns	22.8 *1*	100	(M1)		95.1
34.74 *7*	7/2-	43 s *5*	35.0 *1*	100	M3		1.7
195.90 *10*	(9/2)+	> 150 ns	161.2 *1*	100 *15*	E1		0.1
195.90 *10*	(9/2)+	> 150 ns	46.1 *2*	0.75 *12*	[E1]		0.6
100.663 *20*	(9/2)-	> 1 μs	91.11 *2*	100	E2		7.2
149.78 *4*	13/2+	4.33 d *3*	135.50 *3*	100	M4		872
259.077 *23*	13/2+	4.010 d *5*	19.8	0.24 *1*	[M4]		6.1
259.077 *23*	13/2+	4.010 d *5*	129.5 *2*	100 *5*	M4		*19*
455.272 *7*	5/2-	> 10.5 ps	243.855 *14*	42 *3*	M1		0.5
455.272 *7*	5/2-	> 10.5 ps	325.18 *10*	42 *5*			
455.272 *7*	5/2-	> 10.5 ps	216.012 *9*	47 *5*	M1(+E2)	<0.6	0.6
455.272 *7*	5/2-	> 10.5 ps	255.741 *30*	47 *5*	(M1+E2)		0.1
455.272 *7*	5/2-	> 10.5 ps	356.395 *14*	100 *10*	M1		0.1
544.1 *5*	(5/2-)	> 2.8 ps	544.2	100			
544.1 *5*	(5/2-)	> 2.8 ps	333				
544.1 *5*	(5/2-)	> 2.8 ps	445.2	56.25			
544.1 *5*	(5/2-)	> 2.8 ps	305				
544.1 *5*	(5/2-)	> 2.8 ps	414				
678.3 *10*	5/2-,7/2-	> 72.8 ps	439				
2429.7 *4*	3-	> 166 fs	1552.9 *3*	100			
2603.2 *2*	(1,2,3,4,5)	> 66 fs	1588.1 *1*	100			
2606.0 *1*	(2,3,4,5)	> 111 fs	1729.2 *1*	100			
2711.0 *1*	3-	> 55 fs	2022.2 *1*	100 *8*			
2711.0 *1*	3-	> 55 fs	2355.3 *1*	59 *8*			
399.59 *20*	13/2+	95.41 m *18*	346.5 *2*	100	M4		7.7
424 *2*	(13/2)+	13.6 s *4*	391.93 *14*	100	E3		0.1
1367 *3*	(13/2+)	12 s *5*	1000.0 *29*	100	[M4]		0.1
73.3 *4*	(1/2)+	> 1 μs	60.5 *3*	100	E1		0.1
68.46 *4*	2+	47.6 s *14*	68.46 *4*	100	M3		3.1
120.33 *14*	9/2(-)	2.3 s *1*	101.0 *2*	100	E3		120.4
266.2 *7*	(11/2-)	0.92 s *11*	13.7 *6*	100	(E3)		1.1
290.20 *4*	11/2-	3.9 s *3*	289.8	100	[M4]		18.1
290.20 *4*	11/2-	3.9 s *3*	32.21 *3*	≈4.1	E3		9.2

318.58 *4*	11/2-	30.5 s *2*	56.80 *3*	72 *3*	E3		3.2
318.58 *4*	11/2-	30.5 s *2*	318.60 *10*	100 *11*	M4		11.6
84.656 *20*	5+	8.1 s *2*	84.66 *2*	100	E3		327
595.66 *4*	12-	9.6 h *1*	174.91 *2*	100	M4		227
409.15 *8*	11/2-	7.73 s *6*	409.1 *1*	3.4 *11*	M4		3.9
409.15 *8*	11/2-	7.73 s *6*	130.2 *1*	100 *4*	E3		30.1
811.9 *15*	(12-)	2.272 d *16*	115.2 *15*	100	(M4)		2.4
907 *5*	(11/2-)	6 s *2*	907 *5*		(M4)		0.1
99.3 *5*	13/2+	21.6 s *15*	65.3 *5*	100	E3		
140.76 *5*	13/2(+)	11.8 h *2*	101.25 *4*	100	M4		6.1
176.07 *4*	13/2+	41.6 h *8*	122.78 *3*	100	M4		
298.93 *8*	13/2+	23.8 h *1*	164.97 *7*	100	M4		348
532.48 *10*	13/2+	42.67 m *9*	374.1 *1*	100 *8*	M4+E5	+0.092 *15*	6.0
532.48 *10*	13/2+	42.67 m *9*	118.6	≈8E-5	[M4]		
454.8 *15*	(9/2-)	1.93 s *8*	168.8		(E3)		8.9
414 *39*	(10-)	3.32 s *11*	374.2 *1*	100	E3		0.2
334 *4*	(9/2-)	15.60 s *12*	35 *4*		[E3]		6.9
151.3 *3*	1+,2+,3+	> 34 ns	151.3 *3*	100	E1		0.1
365.2+X	(9/2-)	2.11 m *15*	X		[E3]		
3687.1 *6*	(19-)	> 1.18 ps	297.6 *5*	52 *29*			
3687.1 *6*	(19-)	> 1.18 ps	170.0 *5*	100 *19*	(M1)		1.9
3887.1 *6*	(20-)	> 0.83 ps	200.1 *5*	100	(M1)		1.2
4819.2 *7*	(23-)	> 1.04 ps	683.0 *5*	44 *19*	[E2]		0.0
4819.2 *7*	(23-)	> 1.04 ps	379.1 *5*	100 *31*	(M1)		0.2
482.63 *17*	9/2-	3.6 s *4*	98.97 *12*	100	E3		157.5
394.2 *5*	(7+)	1.41 h *2*	120.1 *3*	100	M4		2.1
543.6 *4*	7+	1.87 h *3*	260.9 *3*	100	M4		34.0
2643.10 *18*	(12-)	3.74 m *3*	1021.5 *2*	100 *9*	[E5]		0.0
2643.10 *18*	(12-)	3.74 m *3*	564.2 *1*	8.0 *14*	M4		1.1
2643.10 *18*	(12-)	3.74 m *3*	316.8 *2*	1.1 *4*	[M4]		13.6
1348.18 *16*	11/2-	1.33 s *11*	1348.1 *3*	3.85	[E5]		0.0
1348.18 *16*	11/2-	1.33 s *11*	997.1 *3*	100	[M4]		0.1
328.04 *5*	5+	> 0.1 ps	288.20 *4*	100.0 *9*	M1		0.4
328.04 *5*	5+	> 0.1 ps	328.03 *4*	37.2 *18*	M1		0.1
6535.47 *21*	(18+)	> 0.5 ps	380.20 *5*	100	(E2)		0.0
319.31 *11*	13/2+	42.9 m *9*	234.4 *1*	100	M4		62.2
4573.2 *6*	14-	> 2.8 ps	762.9 *2*	100 *8*	E2		0.0
4573.2 *6*	14-	> 2.8 ps	530.5 *2*	59 *6*	M1		0.0
4702.5 *6*	(16+)	> 5.5 ps	322.3 *2*	100	(E1)		0.0
4837.2 *6*	15-	> 2.8 ps	794.5 *3*	93 *14*	E2		0.0
4837.2 *6*	15-	> 2.8 ps	264.0 *3*	100 *12*	M1		0.6
424.8+X *2*	(13/2+)	12.2 m *3*	424.8 *2*	100	M4		4.0
629.1 *3*	13/2+	60.8 s *18*	629.1 *5*	100	M4		0.8
2169.85 *8*	9-	3.54 h *2*	786.99 *6*	100	E5		0.1
2169.85 *8*	9-	3.54 h *2*	547.4 *2*	0.25 *8*	E5		0.7
2169.85 *8*	9-	3.54 h *2*	129.1 *2*	0.08 *3*	E4		514
825.11 *10*	13/2+	6.21 s *8*	825.1 *1*	100 *5*	M4		0.2
825.11 *10*	13/2+	6.21 s *8*	4.9 *3*	1.32E-9 *14*	[E3]		7.0
2185.88 *8*	9-	66.93 m *10*	622.2 *2*	0.24 *4*	E5		0.4
2185.88 *8*	9-	66.93 m *10*	911.74 *15*	100.0 *14*	E5		0.0
3175.674 *13*	9/2(+)	> 402 fs	2605.6 *1*	100 *3*	[M2]		0.0
3175.674 *13*	9/2(+)	> 402 fs	447.81 *2*	44 *3*	(M1)		0.1
3175.674 *13*	9/2(+)	> 402 fs	1542.32 *2*	91 *3*	(E2)		0.0
3175.674 *13*	9/2(+)	> 402 fs	835.73 *2*	62 *3*	(E1)		0.0
3225.542 *20*	11/2+	> 333 fs	2655.32 *7*	8.7 *7*	(E3)		0.0
3225.542 *20*	11/2+	> 333 fs	1592.22 *2*	100.0 *7*	M1		0.0
3384.579 *13*	9/2+	> 284 fs	656.62 *2*	100.0 *19*	M1+E2		0.0
3384.579 *13*	9/2+	> 284 fs	1044.71 *2*	37.0 *19*	E1		0.0
3384.579 *13*	9/2+	> 284 fs	2486.2 *5*		[E3]		0.0
3384.579 *13*	9/2+	> 284 fs	761.4 *5*		[E2]		0.0

3384.579 *13*	9/2+	> 284 fs	1751.12 *2*	48.2 *19*	E2		0.(
3429.843 *18*	(9/2+)	> 437 fs	701.88 *3*	63.9 *16*	[M1]		0.(
3429.843 *18*	(9/2+)	> 437 fs	1796.51 *2*	100.0 *16*	[E2]		0.(
3476.364 *13*	9/2(+)	> 388 fs	1136.42 *2*	86.4 *16*	[E1]		0.(
3476.364 *13*	9/2(+)	> 388 fs	748.40 *2*	43.2 *14*	[M1]		0.(
3476.364 *13*	9/2(+)	> 388 fs	1843.09 *2*	100.0 *21*	[E2]		0.(
3509.849 *16*	11/2+	> 208 fs	782.00 *2*	49.3 *9*	M1		0.(
3509.849 *16*	11/2+	> 208 fs	1876.44 *2*	100.0 *9*	(M1)		0.(
3620.496 *21*	11/2+	> 243 fs	1987.13 *2*	100	M1+E2		0.(
3650.09 *3*	9/2-,11/2-	> 312 fs	2016.72 *3*	100			
3673.82 *3*	9/2,11/2	> 263 fs	2040.45 *3*	100			
3711.40 *3*	(7/2+)	> 118 fs	1087.58 *3*	39.3 *16*	[M1]		0.(
3711.40 *3*	(7/2+)	> 118 fs	1048.90 *5*	24.6 *16*	[M1]		0.(
3711.40 *3*	(7/2+)	> 118 fs	3141.2 *1*	100.0 *16*	[E1]		0.(
3726.094 *22*	(5/2+,7/2+)	> 201 fs	2093.0 *5*				
3726.094 *22*	(5/2+,7/2+)	> 201 fs	998.20 *2*	100 *4*	[M1,E2]		0.(
3726.094 *22*	(5/2+,7/2+)	> 201 fs	1386.16 *6*	17 *4*	[E1]		0.(
3726.094 *22*	(5/2+,7/2+)	> 201 fs	1063.71	52 *5*	[M1]		0.(
3828.997 *18*	9/2+,11/2+	> 111 fs	1101.21 *2*	57.8 *16*	(M1+E2)		0.(
3828.997 *18*	9/2+,11/2+	> 111 fs	444.31 *2*	100.0 *16*	(M1+E2)		0.(
3869.37 *5*	9/2+,11/2+,13/2+	> 104 fs	2236.00 *5*	100	Q,D		
3903.33 *10*	(13/2+)	> 17 fs	1175.43 *10*	100	[E2]		0.(
4064.02 *8*	(9/2+,11/2+,13/2+)	> 37 fs	1336.12 *8*	100	Q,D		
3919.966 *13*	6-	> 690 fs	722.252 *8*	100	M1+E2	+0.31 *7*	0.(
3919.966 *13*	6-	> 690 fs	211.51 *2*	82 *5*	M1(+E2)	+0.04 *+7-6*	1.1
3946.578 *14*	4-	> 430 fs	238.22 *3*	25.3 *18*	[M1+E2]	-0.06 *6*	
3946.578 *14*	4-	> 430 fs	748.845 *12*	100 *7*	[M1+E2]	+0.072 *25*	0.(
3946.578 *14*	4-	> 430 fs	471.498 *14*	26.3 *19*	[M1+E2]		0.1
3995.438 *13*	4-	> 690 fs	797.741 *10*	29.7 *12*	[M1+E2]	+0.34 *5*	0.(
3995.438 *13*	4-	> 690 fs	1380.889 *12*	100	[M1(+E2)]	+0.000 *+31-21*	0.(
4037.443 *14*	7-	> 690 fs	117.53 *13*	11 *3*	[M1,E2]		4.(
4037.443 *14*	7-	> 690 fs	839.734 *9*	100	[E2]		0.(
4125.347 *12*	5-	> 490 fs	927.650 *8*	100.0 *25*	[M1+E2]		0.(
4125.347 *12*	5-	> 490 fs	179.5 *6*	0.92 *26*	[M1,E2]		1.2
4125.347 *12*	5-	> 490 fs	650.207 *14*	25.3 *13*	[M1+E2]		0.(
4125.347 *12*	5-	> 490 fs	164.34 *20*	4.9 *7*	[M1,E2]		1.(
4125.347 *12*	5-	> 490 fs	416.79 *6*	5.0 *9*	[M1+E2]	+0.1 *+8-4*	0.1
4206.277 *14*	6-	> 690 fs	1008.558 *10*	100	[M1+E2]		
4206.277 *14*	6-	> 690 fs	497.90 *4*	20.6 *24*	[M1+E2]		
4261.871 *13*	4-	> 520 fs	1064.15 *2*	4.4 *6*	[M1+E2]		
4261.871 *13*	4-	> 520 fs	786.79	58 *2*	[M1+E2]		
4261.871 *13*	4-	> 520 fs	1647.38 *2*	100 *4*	[M1+E2]		
4261.871 *13*	4-	> 520 fs	553.414 *8*	49 *4*	[M1+E2]		
4383.285 *17*	6-	> 690 fs	257.7 *5*	0.67 *25*			
4383.285 *17*	6-	> 690 fs	1185.571 *13*	100 *11*	[M1+E2]		
4383.285 *17*	6-	> 690 fs	176.8 *5*	0.85 *25*			
4383.285 *17*	6-	> 690 fs	463.30 *10*	4.1 *7*	[M1+E2]	-0.69 *+15-19*	
4423.647 *15*	6+	> 110 fs	1225.916 *13*	100	[E1+M2]		
4423.647 *15*	6+	> 110 fs	715.23 *2*	8.6 *11*	[E1+M2]		
4680.266 *22*	7-	> 690 fs	473.98 *5*	40 *11*	[M1+E2]		
4680.266 *22*	7-	> 690 fs	760.30 *2*	100	[M1+E2]		
4711.817 *21*	4-	> 340 fs	2097.27 *2*	100	[M1+E2]		
4711.817 *21*	4-	> 340 fs	1236.79 *4*	29 *4*	[M1+E2]		
4860.78 *6*	8+	> 22 fs	823.28 *11*	34 *6*			
4860.78 *6*	8+	> 22 fs	250.00 *9*	100			
4867.91 *4*	7+	> 97 fs	444.15 *10*	73 *15*			
4867.91 *4*	7+	> 97 fs	830.55 *4*	38 *6*	[M1+E2]		
4867.91 *4*	7+	> 97 fs	386.7 *3*	26 *13*	[M1+E2]		
4867.91 *4*	7+	> 97 fs	484.6 *3*	14 *5*			
4867.91 *4*	7+	> 97 fs	257.06 *5*	100 *15*			

4868.35 *5*	0+	> 312 fs	782.83 *2*					
4868.35 *5*	0+	> 312 fs	4870 *3*		E0			
4962.428 *21*	4(-),5(+)	> 440 fs	638.48 *2*	43 *8*				
4962.428 *21*	4(-),5(+)	> 440 fs	1764.71 *3*	100	[M1+E2]	+0.78 *+22-32*		
5085.470 *24*	7-	> 229 fs	879.19 *2*	100	[M1+E2]			
5085.470 *24*	7-	> 229 fs	702.1 *10*	13 *5*				
5092.99 *3*	8+	> 690 fs	482.24 *2*	100				
5092.99 *3*	8+	> 690 fs	232.2 *3*	7.6 *18*				
5193.428 *25*	5+	> 319 fs	769.78 *2*	100 *13*				
5193.428 *25*	5+	> 319 fs	1995.5 *5*	29.2 *23*				
5193.428 *25*	5+	> 319 fs	869.43 *20*	96 *10*				
5195.37 *10*	7+	> 690 fs	1275.5 *5*	7.5 *31*				
5195.37 *10*	7+	> 690 fs	584.62 *15*	36 *6*				
5195.37 *10*	7+	> 690 fs	771.73 *20*	100 *14*				
5195.37 *10*	7+	> 690 fs	334.5 *4*	2.6 *9*				
5195.37 *10*	7+	> 690 fs	715.0 *6*	2.20 *22*				
5195.37 *10*	7+	> 690 fs	327.44 *20*	18.7 *22*				
5241.1 *3*	0+	> 690 fs	5241 *3*		E0			
5241.1 *3*	0+	> 690 fs	2626.6 *3*		[E3]			
5280.47 *4*	0-	> 319 fs	1050.90 *4*	100				
5280.47 *4*	0-	> 319 fs	438.83 *5*	27.6 *15*				
5317.041 *18*	(3)+	> 690 fs	993.105 *12*	100				
5317.041 *18*	(3)+	> 690 fs	2702.42 *3*	23 *3*				
5599.48 *6*	0-	> 159 fs	1369.83 *7*	100				
5599.48 *6*	0-	> 159 fs	757.93 *7*	41 *3*				
5799.41 *9*		> 690 fs	2324.32 *9*					
6101.1 *10*	(5+)	> 690 fs	2626					
169 *4*	(7+)	0.6 s *5*	11 *4*	100				
271 *5*	(10-)	240 s *3*	102.0 *20*	100	(E3)		155	
248.5+X *5*	10-	7.7 s *5*	248.5 *5*	100	E3		1.5	
667 *4*	(1/2+)	24.70 m *15*	667		[M4]		0.7	
846.35 *18*	1/2+	58.5 m *11*	846.3 *3*	100	M4		0.2	
650.57 *10*	7+	> 1.0 ns	140.08 *12*	52 *16*	M1		4.0	
650.57 *10*	7+	> 1.0 ns	650.60 *16*	100	E2		0.0	
936.27 *6*	3+	> 1.7 ps	303.1 *1*	1.0 *1*				
936.27 *6*	3+	> 1.7 ps	936.3 *2*	1.7 *4*				
936.27 *6*	3+	> 1.7 ps	873.3 *2*	100 *3*				
1539.39 *7*	2+,3+	> 1.2 ps	906.32 *15*	100.0 *6*				
1539.39 *7*	2+,3+	> 1.2 ps	470.06 *15*	3.0 *2*				
1539.39 *7*	2+,3+	> 1.2 ps	1476.5 *2*	12.0 *8*				
1539.39 *7*	2+,3+	> 1.2 ps	614.22 *15*	7.4 *5*				
1539.39 *7*	2+,3+	> 1.2 ps	937.8 *2*	3.0 *2*				
1539.39 *7*	2+,3+	> 1.2 ps	602.88 *15*	20.3 *12*				
1347.50+X	(25/2:29/2)(-)	36.9 s *6*	X					
310 *2*	(13/2+)	4.17 m *5*	238 *1*	100	M4		65.2	
423.41 *22*	13/2+	8.96 m *12*	417.8 *2*	100	M4		4.8	
641.64 *14*	13/2+	45 s *2*	641.5 *2*	100	M4		0.8	
641.64 *14*	13/2+	45 s *2*	2.3 *2*	3.1E-11 *2*	[E3]		4E1	
2158.3 *6*		> 200 ns	182.5	100				
1383.16 *7*	19/2-	2.79 s *8*	268.08 *6*	100 *9*	E3		1.1	
1383.16 *7*	19/2-	2.79 s *8*	109.1	<0.7	M3		453	
1462 *5*	(25/2+)	25.2 s *6*	34 *5*	100	(E4)		6.5	
2930 *10*	(18+)	45.1 s *6*	45 *10*	100	[E4]			
343.8 *29*	(10-)	6.3 s *5*	230.9 *2*	100	E3		2.4	
657.1 *5*	(13/2+)	> 10 s	657.1 *5*	100	[M4]			
130.141 *18*	9/2+	> 0.3 ns	68.74 *3*	64 *12*	M1+E2	0.45	17.8	
130.141 *18*	9/2+	> 0.3 ns	6.5 *3*	1.0E2 *3*	[E1]		41.2	
130.141 *18*	9/2+	> 0.3 ns	100.27 *3*	93 *18*	E2		9.6	
1009.601 *14*	2+	≥ 0.8 ps	1009.59 *2*	68 *4*	E2		0.0	
1009.601 *14*	2+	≥ 0.8 ps	374.67 *2*		(E2)		0.0	

1009.601 *14*	2+	≥ 0.8 ps	183.90 *11*	0.20 *7*	M1+E2		2.1
1009.601 *14*	2+	≥ 0.8 ps	956.38 *2*	100 *8*	M1+E2	6.1 *4*	0.(
1009.601 *14*	2+	≥ 0.8 ps	332.07 *5*	2.96 *7*	[E2]		0.1
1009.601 *14*	2+	≥ 0.8 ps	835.59 *8*	3.7 *4*	E2		0.(
1009.601 *14*	2+	≥ 0.8 ps	228.23 *5*	0.41 *7*	E0+E2+M1		1.1
73.92+X	(0-)	1.159 m *11*	<10				
851.74 *3*	2+	≥ 1.74 ps	851.70 *10*	100 *6*	[E2]		0.(
851.74 *3*	2+	≥ 1.74 ps	41.82 *11*	0.24 *12*	[E2]		863 1
851.74 *3*	2+	≥ 1.74 ps	808.20 *10*	60 *6*	E0+E2	0.45 *9*	4.2
851.74 *3*	2+	≥ 1.74 ps	708.3 *2*	31 *4*	[E2]		0.(
0.0760 *4*	1/2+	≈ 26 m	0.0765 *4*	100	E3		>1E1
0.0+X	(5/2+)	> 0.25 µs	1600.3				
0.0+X	(5/2+)	> 0.25 µs	708.2				
1211.2 *8*	8-	1.75 s *12*	681.0 *1*		[E1]		0.(
1211.2 *8*	8-	1.75 s *12*	10 *1*				
48.603 *9*	5-	141 y *2*	48.63 *5*	100	E4		7.(
878.8+Y *10*	(19/2-)	≥ 10 ns	28	100	[E1]		2.(