

¹⁹⁷Pb Z = 82 N = 115 adopted link ENSDF link

Based on ENSDF from Oct 2022, and mass evaluation from 2020

BE = 1550.643 (0.005) MeV

Qbeta+ = 3.609 (0.014) MeV

	Energy T	J+		J-		J-other		T1/2

S-alpha=	-3.892	(0.016)	-----					
197PB 1				0.000	3/2-			1 8.1 M 17
197PB 2				0.085	5/2-			2
197PB 3		0.319						3 42.9 M 9
197PB 4				0.952	7/2-			4
197PB 5							0.989	3/2-, 5/2-
197PB 6							1.015	(5/2, 7/2)-
197PB 7							1.079	(7/2, 9/2)-
197PB 8				1.089	5/2-			8
197PB 9		1.147						9
197PB 10							1.165	(9/2)-

197PB 11							1.167	(7/2)-
197PB 12		1.174						12
197PB 13							1.295	13/2+, 15/2+
197PB 14		1.326						14
197PB 15		1.402						15
197PB 16		1.431						16
197PB 17							1.473	(7/2)-
197PB 18							1.495	3/2-, 5/2-, 7/2-
197PB 19							1.519	
197PB 20		1.525						20

197PB 21		1.525						21
197PB 22							1.554	(5/2, 7/2)-
197PB 23							1.571	-
197PB 24							1.578	(9/2)-
197PB 25							1.588	11/2+, 13/2+, 15/2
197PB 26		1.624						25+
197PB 27							1.634	11/2+, 13/2+
197PB 28							1.649	3/2-, 5/2-, 7/2-
197PB 29				1.676	5/2-			26
197PB 30		1.687						27

197PB 31							1.689	3/2+, 5/2+, 7/2+
197PB 32							1.730	
197PB 33							1.740	9/2+, 11/2+, 13/2+
197PB 34							1.749	
197PB 35							1.770	15/2
197PB 36		1.774						34

197PB 37						1.850	15/2	37
197PB 38						1.857	15/2+,17/2+,19/2	38+
197PB 39		1.882	21/2+					39
197PB 40				1.914	21/2-			40 1.15 US 20

197PB 41						1.922	(5/2,7/2,9/2)+	41
197PB 42		1.946	11/2+					42
197PB 43						1.985		43
197PB 44						2.024		44
197PB 45						2.059		45
197PB 46		2.064	21/2+					46
197PB 47		2.201	13/2+					47
197PB 48		2.297	19/2+					48
197PB 49						2.301	(23/2)-	49
197PB 50		2.351	19/2+					50

197PB 51						2.393	(25/2)-	51
197PB 52						2.467	17/2+,21/2+	52
197PB 53						2.474	(27/2)-	53
197PB 54						2.654	(25/2)+	54
197PB 55		2.690	21/2+					55
197PB 56						2.691	(23/2)	56
197PB 57						2.724	23/2	57
197PB 58		2.851	25/2+					58
197PB 59						3.080	(29/2)+	59
197PB 60						3.098	23/2,27/2	60

197PB 61						3.169	(33/2)+	61 55 NS 5
197PB 62						3.266	23/2,27/2	62
197PB 63						3.284	(27/2-)	63
197PB 64						3.313	(29/2+)	64
197PB 65						3.427	29/2	65
197PB 66				3.436	29/2-			66 0.76 PS 21
197PB 67				3.707	31/2-			67 0.49 PS 13
197PB 68		3.756	33/2+					68
197PB 69						3.768	31/2	69
197PB 70						4.024	31/2	70

197PB 71						4.058		71
197PB 72				4.066	33/2-			72 0.42 PS 11
197PB 73		4.082	33/2+					73
197PB 74						4.182	33/2	74
197PB 75				4.436	35/2-			75 0.34 PS 11
197PB 76						4.497	35/2	76

S-p	=	4.538 (0.013)			-----			
197PB 77						4.581	33/2	77
197PB 78						4.677	35/2	78
197PB 79		4.795	37/2+					79
197PB 80				4.821	37/2-			80 0.7 PS 4

197PB 81		4.907	39/2+				81
197PB 82						4.912 37/2	82
197PB 83		5.058	41/2+				83
197PB 84					5.186	39/2-	84
197PB 85						5.233 39/2(+)	85
197PB 86		5.259	43/2+				86
197PB 87						5.396 41/2(+)	87
197PB 88					5.480	41/2-	88 0.46 PS 14
197PB 89		5.526	45/2+				89
197PB 90						5.614 43/2(+)	90

197PB 91						5.681 41/2	91
197PB 92					5.707	43/2-	92 0.55 PS 21
197PB 93		5.862	47/2+				93 0.118 PS 21
197PB 94						5.879 45/2(+)	94
197PB 95					5.953	45/2-	95
197PB 96					5.997	43/2-	96
197PB 97					6.014	43/2-	97
197PB 98						6.196 47/2(+)	98
197PB 99					6.202	45/2-	99
197PB 100					6.238	47/2-	100 0.277 PS 14

197PB 101						6.263 45/2(+)	101
197PB 102		6.266	49/2+				102 0.090 PS +21-14
197PB 103					6.408	47/2-	103
197PB 104						6.518 47/2(+)	104
197PB 105						6.559 49/2(+)	105
197PB 106					6.565	49/2-	106 0.201 PS +21-14
197PB 107					6.660	49/2-	107
197PB 108		6.712	51/2+				108 0.111 PS 14
197PB 109						6.807 49/2(+)	109
197PB 110					6.904	51/2-	110 0.118 PS +21-14

197PB 111						6.913 51/2(+)	111
197PB 112					6.994	51/2-	112
197PB 113						7.148 51/2(+)	113
197PB 114		7.179	53/2+				114 0.19 PS 4
197PB 115					7.257	53/2-	115 0.118 PS +14-7
197PB 116						7.286 53/2(+)	116
197PB 117					7.407	53/2-	117

S-n =		7.469 (0.009)					
197PB 118						7.551 53/2(+)	118
197PB 119		7.613	55/2+				119
197PB 120					7.660	55/2-	120

197PB 121						7.677 55/2(+)	121
197PB 122					7.860	55/2-	122
197PB 123		7.984	57/2+				123
197PB 124						8.016 55/2(+)	124
197PB 125						8.068 57/2(+)	125

197PB 126				8.120	57/2-			126
S-2p	=	8.310	(0.024)	-----				
197PB 127				8.353	57/2-			127
197PB 128		8.372	59/2+					128
197PB 129						8.439	59/2(+)	129
197PB 130						8.520	57/2(+)	130

197PB 131				8.635	59/2-			131
197PB 132		8.795	61/2+					132
197PB 133						8.830	61/2(+)	133
197PB 134				8.878	59/2-			134
197PB 135						9.042	59/2(+)	135
197PB 136				9.198	61/2-			136
197PB 137		9.246	63/2+					137
197PB 138				9.441	61/2-			138
197PB 139						9.582	61/2(+)	139
197PB 140		9.724	65/2+					140

197PB 141				9.794	63/2-			141

S-p = 4.538 (0.013)-----
 S-n = 7.469 (0.009)-----
 S-2p = 8.310 (0.024)-----
 S-2n = 17.150 (0.007)-----
 S-alpha = -3.892 (0.016)-----

S+p = -1.917 (0.028)
 S+n = -9.393 (0.010)
 S+2p = -5.071 (0.007)
 S+2n = -16.629 (0.008)
 S+alpha = 5.799 (0.007)

gap p = 2.620 (0.031)
 gap n = -1.925 (0.013)
 gap 2p = 3.239 (0.025)
 gap 2n = 0.521 (0.011)
 gap alpha = 1.907 (0.018)