

^{198}Pb $Z = 82$ $N = 116$ [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 1560.036 (0.009) MeV

Qbeta+ = 1.461 (0.012) MeV

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

S-alpha=	-3.692	(0.009)	-----		
198PB 1	0.000	0+			1 2.4 H 1
198PB 2	1.064	2+			2
198PB 3				1.392 (0+)	3
198PB 4	1.626	4+			4
198PB 5				1.735 (0+)	5
198PB 6				1.824 (5)-	6 50.4 NS 5
198PB 7				1.981 (4+)	7
198PB 8				1.996 (5)	8
198PB 9				2.099 (4,5,6)	9
198PB 10				2.141 (7)-	10 4.19 US 10

198PB 11				2.191 (6)	11
198PB 12				2.231 (9)-	12 137 NS 10
198PB 13				2.258 (6-)	13
198PB 14				2.342	14
198PB 15				2.345	15
198PB 16				2.369 (6-)	16
198PB 17				2.569 (6+)	17
198PB 18				2.603	18
198PB 19				2.612	19
198PB 20				2.695	20

198PB 21				2.704	21
198PB 22				2.772 (10)+	22
198PB 23				2.822 (12)+	23 212 NS 4
198PB 24				3.033	24
198PB 25				3.185	25
198PB 26				3.269	26
198PB 27			3.489 11-		27
198PB 28				3.565	28
198PB 29				3.574 (12)	29
198PB 30	3.751	14+			30

198PB 31			3.810 12-		31
198PB 32				3.966	32
198PB 33				4.030	33
198PB 34				4.032 (14)	34
198PB 35			4.043 13-		35
198PB 36				4.191 (16+)	36

198PB 37						4.236				37
198PB 38				4.380		15-				38
198PB 39		4.512		16+						39
198PB 40				4.573		14-				40 2.8 PS GT

198PB 41						4.701		(17)		41
198PB 42						4.702		(16+)		42 5.5 PS GT
198PB 43						4.774		(17-)		43
198PB 44						4.776		(14+)		44
198PB 45						4.818				45
198PB 46				4.837		15-				46 2.8 PS GT
198PB 47						4.843				47
198PB 48						4.879		(15+)		48
198PB 49						4.883		(14+)		49
198PB 50						4.896		(19+)		50 6.4 NS

198PB 51						4.977		(15+)		51
198PB 52						5.004		(16+)		52
S-p =		5.015		(0.019)	-----					
198PB 53						5.016				53
198PB 54						5.019				54
198PB 55				5.066		17-				55
198PB 56		5.072		18+						56
198PB 57						5.093		(16+)		57
198PB 58						5.203		(17+)		58
198PB 59		5.209		18+						59
198PB 60						5.250		(17+)		60

198PB 61						5.304		(16)		61
198PB 62						5.379		(16-)		62
198PB 63				5.452		19-				63
198PB 64						5.468		(18+)		64
198PB 65						5.478		(18+)		65 3.2 PS 10
198PB 66				5.493		17-				66
198PB 67						5.524		(17)		67
198PB 68				5.544		19-				68
198PB 69				5.648		18-				69 0.44 PS 7
198PB 70						5.779		(19+)		70

198PB 71						5.814		(19+)		71
198PB 72						5.822		(18)		72
198PB 73						5.843		(21)		73
198PB 74				5.863		19-				74 0.49 PS +7-14
198PB 75		5.871		20+						75
198PB 76						6.041				76
198PB 77				6.047		21-				77
198PB 78						6.120		(19)		78
198PB 79				6.126		21-				79
198PB 80				6.142		20-				80 0.24 PS +10-7

198PB 81						6.152	(17-)	81		
198PB 82						6.167	(20+)	82		
198PB 83						6.242	(20+)	83	2.4 PS	10
198PB 84						6.393	(18-)	84		
198PB 85						6.425	(20)	85		
198PB 86				6.484	21-			86	0.14 PS	+14-7
198PB 87		6.501	22+					87		
198PB 88						6.515	(19-)	88		
198PB 89						6.519	(20-)	89		
198PB 90						6.555	(21+)	90		

198PB 91				6.660	23-			91		
198PB 92						6.661	(21+)	92		
198PB 93						6.674	(20-)	93		
198PB 94						6.691	(21+)	94		
198PB 95						6.719		95		
198PB 96						6.730		96		
198PB 97						6.735	(21-)	97		
198PB 98						6.867	(22+)	98		
198PB 99				6.873	22-			99	0.17 PS	3
198PB 100				6.873	23-			100		

198PB 101						6.878	(21-)	101		
198PB 102						6.942	(22+)	102		
198PB 103						6.997	(22+)	103		
198PB 104						7.017	(22-)	104		
198PB 105						7.074	(23+)	105	1.46 PS	28
198PB 106						7.079	(22+)	106		
198PB 107						7.143	(22-)	107		
198PB 108				7.295	23-			108	0.12 PS	+12-3
198PB 109						7.312	(24+)	109	0.59 PS	21
198PB 110						7.334	(23+)	110		

198PB 111						7.361	(23-)	111		
198PB 112						7.456	(23+)	112		
198PB 113						7.480	(23-)	113		
198PB 114						7.555	(24+)	114		
198PB 115						7.591	(25+)	115	0.80 PS	40
198PB 116				7.739	24-			116	0.14 PS	+6-4
198PB 117				7.748	25-			117		
198PB 118				7.758	25-			118		
198PB 119						7.780	(24-)	119		
198PB 120						7.795	(25+)	120		

198PB 121						7.835	(24-)	121		
198PB 122						7.917	(26+)	122	0.40 PS	10
198PB 123						8.076	(26+)	123		
198PB 124				8.211	25-			124	0.14 PS	4
198PB 125						8.243	(25-)	125		
198PB 126						8.256	(25-)	126		

198PB 127				8.268		127	
198PB 128				8.291	(27+)	128	0.097 PS +21-28
198PB 129				8.409	(27+)	129	
198PB 130		8.686	26-			130	0.19 PS 5

198PB 131				8.695	(26-)	131	
198PB 132				8.713	(28+)	132	0.105 PS +21-28
198PB 133				8.740	(26-)	133	
198PB 134				8.800	(28+)	134	
S-2p	=	8.819	(0.009)	-----			
198PB 135		9.112	27-			135	
198PB 136				9.146	(27-)	136	
198PB 137				9.155	(27-)	137	
198PB 138				9.176	(29+)	138	0.097 PS +21-28
198PB 139				9.255	(29+)	139	
S-n	=	9.393	(0.010)	-----			
198PB 140		9.512	28-			140	

198PB 141				9.682	(30+)	141	0.14 PS 4
198PB 142				9.770	(30+)	142	
198PB 143		9.931	29-			143	
198PB 144				10.231	(31+)	144	
198PB 145				10.329	(31+)	145	
198PB 146		10.380	30-			146	
198PB 147				10.821	(32+)	147	
198PB 148		10.869	31-			148	
198PB 149				10.921	(32+)	149	
198PB 150		11.399	32-			150	

198PB 151				11.439	(33+)	151	
198PB 152		11.971	33-			152	
198PB 153				12.060	(34+)	153	
198PB 154		12.580	34-			154	
198PB 155				12.700	(35+)	155	
198PB 156				0+X		156	
198PB 157				304.4+X		157	
198PB 158				652.1+X		158	
198PB 159				1042.4+X		159	
198PB 160				1474.8+X		160	

198PB 161				1948.6+X		161	
198PB 162				2463.2+X		162	
198PB 163				3018.0+X		163	
198PB 164				3651.4+X		164	
198PB 165				4323.2+X		165	
198PB 166				5032.6+X		166	
198PB 167				5779.3+X		167	
198PB 168				6562.0+X		168	
198PB 169				7380.5+X		169	
198PB 170				8231.7+X		170	

198PB 171		9121.7+X	171
198PB 172		0+Y	172
198PB 173		281.4+Y	173
198PB 174		605.5+Y	174
198PB 175		971.1+Y	175
198PB 176		1377.8+Y	176
198PB 177		1825.7+Y	177
198PB 178		2313.9+Y	178
198PB 179		2841.8+Y	179
198PB 180		3409.0+Y	180

198PB 181		4014.4+Y	181
198PB 182		4656.2+Y	182
198PB 183		5332.5+Y	183
198PB 184		6038.2+Y	184
198PB 185		6769.9+Y	185
198PB 186		7529.0+Y	186
198PB 187		0+Z	187
198PB 188		215.8+Z	188
198PB 189		475.4+Z	189
198PB 190		778.0+Z	190

198PB 191		1122.6+Z	191
198PB 192		1508.9+Z	192
198PB 193		1937.4+Z	193
198PB 194		2406.2+Z	194
198PB 195		2914.4+Z	195
198PB 196		3462.2+Z	196
198PB 197		4048.6+Z	197
198PB 198		4672.4+Z	198
198PB 199		5332.4+Z	199
198PB 200		6028.2+Z	200

S-p = 5.015 (0.019)-----
S-n = 9.393 (0.010)-----
S-2p = 8.819 (0.009)-----
S-2n = 16.862 (0.012)-----
S-alpha= -3.692 (0.009)-----

S+p = -2.019 (0.014)
S+n = -7.235 (0.013)
S+2p = -5.452 (0.012)
S+2n = -16.326 (0.014)
S+alpha = 5.701 (0.012)

gap p = 2.996 (0.023)
gap n = 2.158 (0.017)

gap 2p = 3.367 (0.015)
gap 2n = 0.536 (0.018)
gap alpha = 2.009 (0.015)