

$^{196}\text{Pb}$        $Z = 82$        $N = 114$       [link to full NNDC output](#)

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

BE = 1543.174 ( 0.008) MeV

Qbeta+ = 2.148 ( 0.014) MeV

	Energy T	J+		J-		J-other		T1/2
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S-alpha=	-4.238	( 0.017)	-----					
196PB 1	0.000	0+						1 37 M 3
196PB 2	1.049	2+						2 100 NS LT
196PB 3	1.143	0+						3
196PB 4	1.450	2+						4
196PB 5	1.698	0+						5
196PB 6	1.738	4+						6 1 US LT
196PB 7			1.798	5-				7 140 NS 14
196PB 8					1.826	3+,4+		8
196PB 9					1.862	(4+)		9
196PB 10	1.896	2+						10
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196PB 11					1.992	2-,3-		11
196PB 12					2.060	(1-,2+)		12
196PB 13					2.124	(1-,2,3)		13
196PB 14			2.169	7-				14 5 NS LT
196PB 15	2.203	4+						15
196PB 16			2.308	9-				16 52 NS 5
196PB 17					2.334	(8-)		17
196PB 18					2.376	(5+),(6)+		18
196PB 19					2.424	(6+)		19
196PB 20					2.471	(3,4,5-)		20
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196PB 21			2.591	8-				21
196PB 22					2.622	(8+)		22 50 NS 15
196PB 23					2.630	(8+)		23
196PB 24	2.645	10+						24 2 NS LT
196PB 25	2.695	12+						25 270 NS 4
196PB 26			3.038	9-				26
196PB 27	3.042	4+						27
196PB 28			3.043	9-				28
196PB 29			3.087	9-				29
196PB 30			3.193	11-				30 72 NS 4
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196PB 31			3.281	10-				31
196PB 32			3.338	11-				32
196PB 33			3.394	10-				33
196PB 34	3.461	12+						34
196PB 35			3.509	11-				35
196PB 36	3.654	14+						36

196PB 37				3.669	10-				37
196PB 38				3.739	12-				38
196PB 39				3.829	12-				39
196PB 40							3.863		40
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196PB 41				3.886	11-				41
196PB 42		3.918	14+						42
196PB 43				4.028	11-				43
196PB 44				4.032	13-				44
196PB 45				4.047	13-				45
196PB 46				4.068	12-				46
196PB 47				4.122	15-				47
196PB 48		4.219	16+						48
196PB 49				4.280	11-				49
196PB 50		4.333	16+						50
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196PB 51				4.385	12-				51
196PB 52				4.385	14-				52
196PB 53				4.430	14-				53
196PB 54				4.480	16-				54
S-p =		4.482 ( 0.013)							5
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196PB 55							4.543	(12-)	55
196PB 56				4.550	12-				56
196PB 57							4.551		57
196PB 58				4.561	15-				58
196PB 59							4.582	(13-)	59
196PB 60				4.582	14-				60
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196PB 61				4.586	13-				61
196PB 62		4.589	12+						62
196PB 63				4.625	13-				63
196PB 64				4.648	16-				64
196PB 65				4.653	15-				65
196PB 66		4.658	14+						66
196PB 67				4.677	17-				67
196PB 68				4.696	15-				68
196PB 69				4.724	17-				69
196PB 70		4.748	15+						70
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196PB 71							4.804	(18-)	71
196PB 72		4.818	16+						72
196PB 73				4.844	16-				73
196PB 74		4.850	16+						74
196PB 75		4.853	16+						75
196PB 76				4.864	16-				76
196PB 77				4.899	15-				77
196PB 78		4.964	18+						78
196PB 79				4.972	17-				79
196PB 80				4.986	15-				80
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196PB 81		4.996	17+				81
196PB 82		5.036	17+				82
196PB 83					5.155	16-	83
196PB 84					5.166	18-	84
196PB 85					5.173	16-	85
196PB 86		5.188	18+				86 0.89 PS 15
196PB 87					5.212	17-	87
196PB 88					5.236	17-	88
196PB 89					5.255	19-	89
196PB 90					5.265	16-	90
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196PB 91		5.284	18+				91
196PB 92					5.330	16-	92
196PB 93					5.343	18-	93
196PB 94					5.351	19-	94
196PB 95					5.381	17-	95
196PB 96					5.481	19-	96
196PB 97		5.493	20+				97
196PB 98		5.503	19+				98 0.67 PS 14
196PB 99					5.559	18-	99
196PB 100					5.576	17-	100
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196PB 101		5.577	19+				101
196PB 102					5.608	19-	102
196PB 103					5.658	18-	103
196PB 104					5.685	20-	104
196PB 105					5.706	19-	105
196PB 106		5.709	20+				106
196PB 107					5.728	19-	107
196PB 108					5.786	19-	108
196PB 109		5.859	6+				109
196PB 110					5.870	19-	110
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196PB 111		5.878	20+				111 0.93 PS 35
196PB 112					5.886	18-	112
196PB 113					5.896	19-	113
196PB 114		5.928	20+				114
196PB 115		5.934	20+				115
196PB 116					5.952	21-	116
196PB 117					5.976	21-	117
196PB 118					6.026	21-	118
196PB 119		6.030	8+				119
196PB 120					6.041	19-	120
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196PB 121		6.051	21+				121
196PB 122		6.075	20+				122
196PB 123					6.160	20-	123
196PB 124					6.185	20-	124
196PB 125					6.196	20-	125
196PB 126		6.233	21+				126

196PB 127		6.246	10+							127
196PB 128					6.284	22-				128
196PB 129		6.294	21+							129
196PB 130		6.334	22+							130
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196PB 131					6.349	21-				131
196PB 132		6.361	22+							132
196PB 133					6.369	21-				133
196PB 134					6.379	21-				134
196PB 135		6.458	22+							135
196PB 136					6.499	21-				136
196PB 137		6.505	12+							137
196PB 138		6.516	22+							138
196PB 139		6.534	21+							139
196PB 140					6.557	22-				140
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196PB 141		6.574	22+							141
196PB 142		6.581	21+							142
196PB 143					6.602	22-				143
196PB 144		6.615	23+							144
196PB 145					6.646	20-				145
196PB 146					6.651	23-				146
196PB 147		6.658	23+							147
196PB 148		6.690	22+							148
196PB 149		6.693	24+							149
196PB 150					6.725	23-				150
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196PB 151		6.780	22+							151
196PB 152					6.808	23-				152
196PB 153		6.808	14+							153
196PB 154		6.818	23+							154
196PB 155								6.846	(8-)	155
196PB 156					6.858	22-				156
196PB 157								6.866		157
196PB 158					6.881	23-				158
196PB 159								6.945	(9-)	159
196PB 160		7.028	24+							160
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196PB 161		7.042	23+							161
196PB 162					7.043	24-				162 0.146 PS +10-8
196PB 163								7.051	(10-)	163
196PB 164		7.075	23+							164
196PB 165					7.117	24-				165
196PB 166		7.154	16+							166
196PB 167					7.172	23-				167
196PB 168								7.172	(11-)	168
196PB 169		7.175	24+							169
196PB 170					7.212	24-				170
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196PB 171					7.213	23-				171

196PB 172				7.246	23-				172	
196PB 173							7.255		173	
196PB 174		7.267	25+						174	
196PB 175							7.299	(12-)	175	
196PB 176				7.302	22-				176	
196PB 177		7.337	24+						177	
196PB 178							7.440	(13-)	178	
196PB 179				7.441	25-				179 0.12 PS +8-6	
196PB 180		7.465	24+						180	
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196PB 181				7.492	25-				181	
196PB 182				7.508	22-				182	
196PB 183		7.542	18+						183 0.46 PS 8	
196PB 184		7.553	26+						184 0.132 PS +21-28	
196PB 185				7.564	25-				185	
196PB 186				7.565	24-				186	
196PB 187							7.588	(14-)	187	
196PB 188		7.588	25+						188	
196PB 189				7.593	24-				189	
196PB 190		7.635	25+						190	
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S-2p	=	7.742	( 0.008)	-----						
196PB 191							7.749	(15-)	191	
196PB 192		7.826	25+						192	
196PB 193				7.849	26-				193 0.27 PS 8	
196PB 194		7.892	27+						194 0.118 PS +21-28	
196PB 195				7.896	26-				195	
196PB 196		7.912	26+						196	
196PB 197							7.918	(16-)	197	
196PB 198				7.940	26-				198	
196PB 199				7.941	26-				199	
196PB 200		7.970	20+						200 0.23 PS 4	
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196PB 201		7.978	26+						201 0.118 PS 21	
196PB 202		8.026	26+						202	
196PB 203							8.099	(17-)	203	
196PB 204							8.144	(17-)	204	
196PB 205		8.167	26+						205	
196PB 206		8.201	27+						206 0.159 PS 28	
196PB 207				8.223	27-				207	
196PB 208				8.271	27-				208	
196PB 209							8.287	(18-)	209	
196PB 210		8.290	28+						210 0.090 PS +21-14	
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196PB 211		8.357	27+						211 0.104 PS +21-14	
196PB 212				8.383	27-				212	
196PB 213				8.384	27-				213	
196PB 214		8.440	22+						214 0.152 PS 28	
196PB 215							8.487	(19-)	215	
196PB 216		8.517	27+						216	

196PB 217		8.541	28+							217	0.104 PS +21-14
196PB 218							8.550	(19-)		218	
196PB 219					8.556	28-				219	
196PB 220					8.666	28-				220	
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196PB 221							8.696	(20-)		221	
196PB 222		8.738	29+							222	0.097 PS 14
196PB 223		8.769	28+							223	0.090 PS +21-14
196PB 224					8.851	28-				224	
196PB 225					8.883	28-				225	
196PB 226					8.893	29-				226	
196PB 227							8.915	(21-)		227	
196PB 228							8.938			228	
196PB 229		8.940	29+							229	0.090 PS 14
196PB 230		8.948	24+							230	0.097 PS 14
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196PB 231							8.992	(21-)		231	
196PB 232					9.070	29-				232	
196PB 233							9.144	(22-)		233	0.32 PS 8
196PB 234		9.202	29+							234	0.097 PS +21-14
196PB 235		9.229	30+							235	0.090 PS 21
196PB 236					9.251	30-				236	
196PB 237					9.374	29-				237	
196PB 238							9.381	(23-)		238	
196PB 239		9.404	30+							239	0.097 PS +21-14
196PB 240							9.472	(23-)		240	
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196PB 241		9.495	26+							241	0.076 PS 14
196PB 242					9.498	30-				242	
196PB 243							9.630	(24-)		243	0.152 PS 35
196PB 244		9.646	30+							244	0.076 PS 14
196PB 245					9.647	31-				245	
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S-n	=	9.712 ( 0.020)									
196PB 246		9.755	31+							246	0.111 PS 21
196PB 247							9.884	(25-)		247	
196PB 248		9.917	31+							248	0.097 PS 21
196PB 249					9.951	31-				249	
196PB 250							9.991	(25-)		250	
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196PB 251		10.079	28+							251	0.055 PS 9
196PB 252					10.089	32-				252	
196PB 253		10.100	31+							253	0.090 PS +21-14
196PB 254							10.152	(26-)		254	0.111 PS 21
196PB 255		10.311	32+							255	
196PB 256							10.424	(27-)		256	
196PB 257					10.439	32-				257	
196PB 258		10.462	32+							258	
196PB 259							10.548	(27-)		259	
196PB 260		10.568	32+							260	
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196PB 261				10.578	33-				261
196PB 262		10.700							262 0.052 PS 9
196PB 263							10.710	(28-)	263 0.068 PS 11
196PB 264		10.884							264
196PB 265				10.956	33-				265
196PB 266							11.000	(29-)	266
196PB 267							11.028	33(+)	267
196PB 268		11.060							268
196PB 269				11.112	34-				269
196PB 270							11.304	(30-)	270 0.055 PS 12
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196PB 271		11.355							271 0.026 PS 4
196PB 272		11.457							272
196PB 273		11.585							273
196PB 274							11.611	(31-)	274
196PB 275							11.625	34(+)	275
196PB 276				11.683	35-				276
196PB 277							11.934	(32-)	277
196PB 278		12.023							278
196PB 279		12.044							279 0.032 PS 7
196PB 280							12.256	(33-)	280
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196PB 281				12.282	36-				281
196PB 282		12.586							282
196PB 283							12.600	(34-)	283
196PB 284		12.764							284
196PB 285							12.936	(35-)	285
196PB 286		13.516							286
196PB 287								0+X	287
196PB 288								150.3+X	288
196PB 289								331.3+X	289
196PB 290								529.9+X	290
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196PB 291								774.2+X	291
196PB 292								1071.9+X	292
196PB 293								1420.7+X	293 0.111 PS +28-21
196PB 294								1783.5+X	294 0.104 PS 21
196PB 295								2177.1+X	295
196PB 296								2590.8+X	296 0.139 PS 28
196PB 297								3011.6+X	297
196PB 298								3435.3+X	298 0.111 PS 21
196PB 299								3893.1+X	299
196PB 300								4386.6+X	300
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196PB 301								4906.8+X	301

S-p = 4.482 ( 0.013)-----  
S-n = 9.712 ( 0.020)-----  
S-2p = 7.742 ( 0.008)-----

S-2n = 17.283 ( 0.019)-----  
S-alpha= -4.238 ( 0.017)-----

S+p = -1.628 ( 0.011)  
S+n = -7.469 ( 0.009)  
S+2p = -4.703 ( 0.019)  
S+2n = -16.862 ( 0.012)  
S+alpha = 5.982 ( 0.011)

gap p = 2.854 ( 0.018)  
gap n = 2.243 ( 0.021)  
gap 2p = 3.039 ( 0.021)  
gap 2n = 0.421 ( 0.022)  
gap alpha = 1.743 ( 0.020)