

^{204}Pb $Z = 82$ $N = 122$ adopted link ENSDF link

Based on ensdf_240402 (Apr 2024), and mass evaluation from 2020

BE = 1607.506 (0.001) MeV

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

S-alpha=	-1.969	(0.001)	-----					

204PB 1	0.000	0+					1	1.4E+17 Y GE
204PB 2	0.899	2+					2	2.88 PS 3
204PB 3	1.274	4+					3	265 NS 6
204PB 4	1.351	2+					4	
204PB 5	1.563	4+					5	
204PB 6	1.583	0+					6	65 PS 20
204PB 7	1.583	2+					7	
204PB 8	1.605	3+					8	
204PB 9	1.665	2+					9	
204PB 10	1.681	1(+)					10	

204PB 11	1.712	(3+)					11	
204PB 12	1.730	0+					12	20 PS LT
204PB 13	1.761	2+					13	
204PB 14	1.818	4+					14	
204PB 15						1.872 1	15	
204PB 16						1.933 1	16	
204PB 17	1.948	3+					17	
204PB 18	1.960	(2)+					18	
204PB 19	2.065	5+					19	
204PB 20	2.105	2+					20	

204PB 21	2.158	(4+)					21	
204PB 22				2.186	9-		22	66.93 M 10
204PB 23						2.202 (2,3,4+)	23	
204PB 24						2.238 5,6	24	
204PB 25				2.258	5-		25	
204PB 26				2.264	7-		26	0.45 US +10-3
204PB 27						2.269 1,2+	27	
204PB 28	2.304	3+					28	
204PB 29						2.312 1	29	
204PB 30	2.316	2+					30	

204PB 31				2.338	(4)-		31	
204PB 32	2.386	5+					32	
204PB 33						2.400 1+,2+,3+	33	
204PB 34				2.405	7-		34	
204PB 35						2.409 3	35	
204PB 36	2.433	0+					36	

204PB 37				2.434	6-			37
204PB 38							2.475 1,2,3,4+	38
204PB 39				2.480	6-			39
204PB 40		2.491	3+					40

204PB 41				2.507	5-			41
204PB 42							2.514 (4)	42
204PB 43							2.525 (1,2,3)	43
204PB 44							2.547	44
204PB 45							2.550 2+,3	45
204PB 46							2.592 1,2,3	46
204PB 47				2.621	3-			47
204PB 48		2.627	(5+)					48
204PB 49							2.655 1,2+,3	49
204PB 50		2.666	2+					50

204PB 51				2.697	7-			51
204PB 52		2.719	5+					52
204PB 53							2.732 5-,6-,7-	53
204PB 54							2.732 1,2,3	54
204PB 55							2.767 (2+,3,4)	55
204PB 56		2.808	6+					56
204PB 57							2.829	57
204PB 58							2.862 (5-,6,7)	58
204PB 59							2.887 2,3	59
204PB 60							2.890 (5-,6-)	60

204PB 61		2.897	4+					61
204PB 62				2.913	5-			62
204PB 63				2.920	5-			63
204PB 64							2.928 (5,6,7)-	64
204PB 65				2.929	5-			65
204PB 66							2.942 (4-,5-,6-	66
204PB 67				2.946	10-			67
204PB 68							3.023 (5,6)-	68
204PB 69				3.029	5-			69
204PB 70							3.050	70

204PB 71				3.092	5-			71
204PB 72				3.105	6-			72
204PB 73		3.147	(2)+					73
204PB 74				3.170	5-			74
204PB 75				3.192	11-			75
204PB 76							3.199 5-,6,7-	76
204PB 77		3.215	5+					77
204PB 78		3.226	(2)+					78
204PB 79				3.232	5-			79
204PB 80				3.302	5-			80

204PB 81							3.377 1	81

204PB 82				3.398	6-			82
204PB 83				3.420	(3)-			83
204PB 84							3.425 5-,6-	84
204PB 85		3.450	(10)+					85
204PB 86		3.516	12+					86
204PB 87							3.570	87
204PB 88					3.638	6-		88
204PB 89							3.656 1	89
204PB 90							3.719	90

204PB 91							3.733 6-,7-	91
204PB 92							3.769 5-,6-	92
204PB 93					3.782	5-		93
204PB 94		3.810	(2)+					94
204PB 95							3.843 (5,6+)	95
204PB 96							3.877 (5-,6+)	96
204PB 97							3.892 5-,6-	97
204PB 98		3.893	2+					98 17 FS 3
204PB 99		3.949	(6)+					99
204PB 100							3.996 (5,6+)	100

204PB 101							3.998 (5,6,7)-	101
204PB 102							4.033 (5,6+)	102
204PB 103							4.039 (5,6+)	103
204PB 104							4.068 (5-,6+)	104
204PB 105					4.076	(5)-		105
204PB 106							4.081 (5,6+)	106
204PB 107					4.094	6-		107
204PB 108					4.111	(5)-		108
204PB 109					4.115	6-		109
204PB 110							4.130 (5,6)	110

204PB 111		4.135	14+					111
204PB 112							4.140	112
204PB 113					4.166	5-		113
204PB 114							4.172 (5,6+)	114
204PB 115					4.184	6-		115
204PB 116							4.190	116
204PB 117							4.230 (5,6)	117
204PB 118							4.244 (5,6+)	118
204PB 119							4.250 (5,6+)	119
204PB 120					4.286	6-		120

204PB 121							4.290	121
204PB 122		4.302	15+					122
204PB 123							4.340	123
204PB 124		4.379	2+					124 4.0 FS 4
204PB 125							4.460	125
204PB 126							4.530	126
204PB 127							4.596 1	127

204PB 128				4.620	128
204PB 129				4.650	129
204PB 130			4.853 (11)-		130

204PB 131	4.888	16+			131
204PB 132				4.922 1	132
204PB 133				4.933 1	133
204PB 134				4.980 1	134
204PB 135	5.000	(6)+			135
204PB 136				5.012 1	136
204PB 137			5.100 (9)-		137
204PB 138				5.283 (1,2+)	138
204PB 139	5.349	16+			139
204PB 140				5.366 (1,2+)	140

204PB 141				5.399 1	141
204PB 142			5.520 (9)-		142
204PB 143				5.610 (1,2+)	143
204PB 144			5.665 17-		144
204PB 145				5.675 (1,2+)	145
204PB 146				5.777 1	146
204PB 147				5.796 1	147
204PB 148				5.811 1	148
204PB 149				5.828 1	149
204PB 150				5.839 1	150

204PB 151				5.878 (1,2+)	151
204PB 152				5.891 (1,2+)	152
204PB 153			5.910 (9)-		153
204PB 154				5.944 (1,2+)	154
204PB 155				5.968 1	155
204PB 156				5.981 1	156
204PB 157				5.998 (1,2+)	157
204PB 158				6.009 1	158
204PB 159				6.020 1	159
204PB 160				6.054 1	160

204PB 161				6.067 1	161
204PB 162				6.073 17	162
204PB 163				6.074 1	163
204PB 164				6.084 (1,2+)	164
204PB 165			6.098 19-		165
204PB 166				6.105 (1,2+)	166
204PB 167				6.148 1	167
204PB 168				6.161 (1,2+)	168
204PB 169				6.194 1	169
204PB 170				6.210 (1,2+)	170

204PB 171				6.229 (1,2+)	171
204PB 172				6.254 1	172

204PB 173			6.277 1	173
204PB 174			6.323 1	174
204PB 175			6.411 1	175
204PB 176			6.420 (1,2+)	176
204PB 177			6.457 (1,2+)	177
204PB 178			6.469 (1,2+)	178

S-p	=	6.637 (0.002)		
204PB 179			7.402 (20)	179
204PB 180			7.849 (21)	180

204PB 181			8.126 (22)	181

S-p = 6.637 (0.002) -----
S-n = 8.395 (0.007) -----
S-2p = 12.342 (0.001) -----
S-2n = 15.312 (0.004) -----
S-alpha= -1.969 (0.001) -----

S+p = -3.245 (0.005)
S+n = -6.732 (0.002)
S+2p = -7.657 (0.004)
S+2n = -14.818 (0.002)
S+alpha = 5.216 (0.002)

gap p = 3.393 (0.005)
gap n = 1.663 (0.007)
gap 2p = 4.686 (0.004)
gap 2n = 0.494 (0.004)
gap alpha = 3.247 (0.002)