

^{204}Po $Z = 84$ $N = 120$ [link to full NNDC output](#)

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

BE = 1599.173 (0.011) MeV

Qbeta+ = 2.305 (0.014) MeV

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

S-alpha=	-5.485	(0.016)	-----					
204Po 1	0.000	0+						1 3.519 H 12
204Po 2	0.684	2+						2
204Po 3	1.201	4+						3
204Po 4						1.255 (3)+		4
204Po 5	1.552	4+						5
204Po 6	1.627	6+						6
204Po 7						1.635 (3+)		7
204Po 8	1.639	8+						8 154 NS 4
204Po 9						1.651 (6-,7-)		9
204Po 10						1.716 (3,4+)		10

204Po 11						1.729 (4)+		11
204Po 12	1.962	6+						12
204Po 13			2.042	5-				13
204Po 14						2.100 (3,4,5)+		14
204Po 15						2.194		15
204Po 16			2.227	9-				16 15.6 NS 5
204Po 17	2.248	8+						17
204Po 18			2.290	7-				18
204Po 19			2.303	6-				19
204Po 20						2.324 6,7,8		20

204Po 21						2.376 (7)		21
204Po 22						2.472 (6,7)+		22
204Po 23	2.527	10+						23
204Po 24	2.539	9+						24
204Po 25						2.548 6+,7,8+		25
204Po 26						2.553 6,7,8		26
204Po 27						2.587		27
204Po 28			2.621	11-				28 3.6 NS 2
204Po 29						2.728 (7,8)+		29
204Po 30	2.789	10+						30

204Po 31						2.789 (6,7,8+)		31
204Po 32						2.803 (6,7-)		32
204Po 33			2.828	10-				33
204Po 34						2.895 (11+)		34
204Po 35			2.900	7-				35
204Po 36			2.905	11-				36

204P0	37				2.946	10-				37
204P0	38							3.010	(6+,7,8)	38
204P0	39		3.084	11+						39
204P0	40		3.125	12+						40

204P0	41		3.134	11+						41
204P0	42							3.217	(10,11,12)-	42
204P0	43				3.227	12-				43
204P0	44							3.387		44
204P0	45				3.387	13-				45
204P0	46				3.439	13-				46
204P0	47				3.459	12-				47
204P0	48				3.528	13-				48
204P0	49				3.564	15-				49
204P0	50							3.576		50

204P0	51							3.649		51
204P0	52							3.723		52
204P0	53				3.767	13-				53
204P0	54				3.899	14-				54
204P0	55				3.975	15-				55
204P0	56							4.096		56
S-p	=	4.105 (0.017)-----								
204P0	57							4.137		57
204P0	58							4.169	(16-)	58
204P0	59				4.175	15-				59
204P0	60							4.187		60

204P0	61				4.203	15-				61
204P0	62							4.212	(14+)	62
204P0	63							4.313	(16-)	63
204P0	64				4.359	16-				64
204P0	65				4.362	13-				65
204P0	66							4.383	(17-)	66
204P0	67							4.438	(16+)	67
204P0	68				4.471	17-				68
204P0	69							4.532		69
204P0	70							4.615	(18-)	70

204P0	71							4.819		71
204P0	72							4.978		72
204P0	73							5.155		73
204P0	74							5.295	(19-)	74
204P0	75							5.911	(20,21-)	75

S-p	=	4.105 (0.017)-----								
S-n	=	9.102 (0.014)-----								
S-2p	=	6.979 (0.012)-----								
S-2n	=	16.542 (0.014)-----								

S-alpha= -5.485 (0.016)-----

S+p = -1.920 (0.019)

S+n = -7.251 (0.015)

S+2p = -5.370 (0.014)

S+2n = -15.990 (0.012)

S+alpha = 6.261 (0.016)

gap p = 2.186 (0.025)

gap n = 1.850 (0.020)

gap 2p = 1.609 (0.018)

gap 2n = 0.552 (0.018)

gap alpha = 0.776 (0.022)