

^{209}Po $Z = 84$ $N = 125$ adopted link ENSDF link

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

BE = 1637.554 (0.002) MeV

Qbeta+ = 1.893 (0.002) MeV

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

S-alpha=	-4.979	(0.002)	-----		
209PO 1			0.000	1/2-	1 124 Y 3
209PO 2			0.545	5/2-	2 70 PS 20
209PO 3			0.854	3/2-	3
209PO 4			1.175	5/2-	4
209PO 5				1.214 1/2-,3/2-	5
209PO 6			1.327	9/2-	6
209PO 7			1.409	7/2-	7
209PO 8			1.418	13/2-	8 24.2 NS 4
209PO 9			1.473	17/2-	9 89.3 NS 5
209PO 10			1.522	11/2-	10 70 PS 20

209PO 11			1.716	9/2-	11
209PO 12	1.761	13/2+			12
209PO 13			1.938	17/2-	13
209PO 14			1.991	7/2-	14
209PO 15			2.030	19/2-	15
209PO 16				2.061 (5/2-,7/2-)	16
209PO 17				2.082 (5/2-,7/2-)	17
209PO 18			2.167	21/2-	18
209PO 19				2.186 (5/2-,7/2-)	19
209PO 20				2.206 (5/2-,7/2-)	20

209PO 21				2.239 5/2-,7/2-	21
209PO 22	2.312	9/2+			22
209PO 23				2.339 5/2-,7/2-	23
209PO 24				2.363 5/2-,7/2-	24
209PO 25				2.654 (5/2+)	25
209PO 26				2.664 5/2-,7/2-	26
209PO 27	2.770	23/2+			27 2.5 NS 7
209PO 28				2.836 (9/2+,11/2-)	28
209PO 29	2.865	11/2+			29
209PO 30	2.902	11/2+			30

209PO 31				2.908 (11/2+)	31
209PO 32	2.976	25/2+			32
209PO 33	2.978	11/2+			33
209PO 34				3.073 (9/2+)	34
209PO 35				3.252	35
209PO 36	3.620	27/2+			36 7 NS LT

209P0	37		4.168	29/2+			37					
209P0	38				4.265	31/2-	38	119	NS		4	
209P0	39				4.354	31/2-	39		7	NS	LT	
209P0	40				4.531	33/2-	40		7	NS	LT	

S-p = 4.785 (0.003)-----

209P0	41				5.355	35/2-	41		3.5	NS	LT	
209P0	42		5.503	37/2+			42		10	NS	LT	
209P0	43		6.233	39/2+			43					
209P0	44					6.302	44					
						(39/2+)						
209P0	45					6.464	45					
						(41/2+)						
209P0	46					6.739	46		7	NS	LT	
						(43/2+)						
209P0	47					6.807	47					
						(41/2+)						

S-n = 6.968 (0.002)-----

209P0	48					7.159	48					
						(45/2+)						
209P0	49					7.248	49					
						(43/2+)						
209P0	50					7.693	50					
						(47/2+)						

209P0	51					8.391	51					
						(47/2-)						

S-p = 4.785 (0.003)-----

S-n = 6.968 (0.002)-----

S-2p = 8.492 (0.002)-----

S-2n = 15.363 (0.007)-----

S-alpha = -4.979 (0.002)-----

S+p = -2.895 (0.008)

S+n = -7.659 (0.002)

S+2p = -6.967 (0.007)

S+2n = -12.209 (0.002)

S+alpha = 8.245 (0.004)

gap p = 1.890 (0.008)

gap n = -0.691 (0.003)

gap 2p = 1.525 (0.007)

gap 2n = 3.153 (0.007)

gap alpha = 3.266 (0.004)