

^{204}Rn $Z = 86$ $N = 118$ adopted link ENSDF link

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

BE = 1587.237 (0.007) MeV

Qbeta+ = 3.905 (0.024) MeV

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

S-alpha=	-6.547	(0.011)	-----		
204RN 1	0.000	0+			1 74.5 S 14
204RN 2	0.543	2+			2
204RN 3	1.132	4+			3
204RN 4				1.628 (2,3,4+)	4
204RN 5	1.773	6+			5
204RN 6	1.806	6+			6
204RN 7				1.912 (5,6+)	7
204RN 8	2.033	8+			8 5 NS LT
204RN 9	2.105	8+			9
204RN 10				2.183 (6,7)	10

204RN 11			2.219 9-		11
204RN 12				2.239 (7,8+)	12
204RN 13	2.248	8+			13
204RN 14				2.365 (8,9)	14
204RN 15				2.371 (8,9)	15
204RN 16	2.453	10+			16
204RN 17			2.462 10-		17 33.4 NS 24
204RN 18				2.540 (8+)	18
204RN 19			2.597 11-		19
204RN 20	2.637	10+			20

204RN 21	2.681	10+			21
204RN 22	2.688	10+			22
204RN 23	2.794	9+			23
204RN 24				2.885 (11,12-)	24
204RN 25				2.895 (10+)	25
204RN 26				2.933 (10+)	26
204RN 27	3.035	12+			27 14 NS 4

S-p	= 3.096	(0.013)	-----		
204RN 28				3.151 (12+)	28
204RN 29				3.165 (11-)	29
204RN 30				3.193 11	30

204RN 31				3.228 (11,12+)	31
204RN 32				3.246 (10+)	32
204RN 33			3.306 13-		33
204RN 34				3.399 (11,12+)	34
204RN 35				3.411 (12+)	35

204RN 36						3.468		36
204RN 37						3.474	(11,12+)	37
204RN 38				3.507	13-			38
204RN 39						3.532	(13-)	39
204RN 40		3.677	12+					40

204RN 41						3.737	(12,13,14+)	41
204RN 42						3.782	(12,13,14+)	42
204RN 43						3.895	(13,14,15-)	43
204RN 44		3.949	14+					44
204RN 45						3.980	(12,13,14+)	45
204RN 46						3.984	(14,15-)	46
204RN 47		4.002	14+					47
204RN 48						4.087	(14,15,16+)	48
204RN 49						4.096	(15-)	49
204RN 50						4.121	(13,14+)	50

204RN 51						4.254	(14,15-)	51
204RN 52						4.414	(15,16,17-)	52
204RN 53						4.583	(15,16,17-)	53

S-p = 3.096 (0.013)-----
S-n = 9.857 (0.009)-----
S-2p = 4.607 (0.011)-----
S-2n = 17.838 (0.019)-----
S-alpha= -6.547 (0.011)-----

S+p = -0.629 (0.011)
S+n = -7.811 (0.009)
S+2p = -3.042 (0.019)
S+2n = -17.305 (0.011)
S+alpha = 7.273 (0.012)

gap p = 2.468 (0.017)
gap n = 2.047 (0.013)
gap 2p = 1.564 (0.023)
gap 2n = 0.533 (0.022)
gap alpha = 0.727 (0.016)