

^{222}Rn $Z = 86$ $N = 136$ [link to full NNDC output](#)

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

BE = 1708.178 (0.002) MeV

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

S-alpha=	-5.590	(0.003)	-----		
222RN 1	0.000	0+			1 3.8235 D 3
222RN 2	0.186	2+			2 0.32 NS 2
222RN 3	0.448	4+			3
222RN 4			0.601	1-	4
222RN 5			0.635	3-	5
222RN 6				0.768 (6+)	6
222RN 7				0.798 (5-)	7
222RN 8				1.049 (7-)	8
222RN 9				1.128 (8+)	9
222RN 10				1.357 (9-)	10

222RN 11				1.513 (10+)	11
222RN 12				1.708 (11-)	12
222RN 13				1.913 (12+)	13
222RN 14				2.089 (13-)	14
222RN 15				2.317 (14+)	15
222RN 16				2.485 (15-)	16
222RN 17				2.728 (16+)	17
222RN 18				2.882 (17-)	18
222RN 19				3.286 (19-)	19
222RN 20				3.696 (21-)	20

S-p = 7.699 (0.014)-----
 S-n = 6.170 (0.006)-----
 S-2p = 13.469 (0.018)-----
 S-2n = 10.382 (0.003)-----
 S-alpha= -5.590 (0.003)-----

S+p = -5.279 (0.003)
 S+n = -4.054 (0.008)
 S+2p = -12.124 (0.003)
 S+2n = -10.070 (0.010)
 S+alpha = 4.871 (0.003)

gap p = 2.421 (0.014)
 gap n = 2.117 (0.010)
 gap 2p = 1.345 (0.018)
 gap 2n = 0.313 (0.010)

gap alpha = -0.720 (0.004)