

^{219}Rn $Z = 86$ $N = 133$ adopted link ENSDF link

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

BE = 1691.507 (0.002) MeV

Qbeta- = 0.212 (0.007) MeV

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

S-alpha=	-6.946	(0.003)	-----		
219RN 1	0.000	5/2+			1 3.96 S 1
219RN 2				0.004 (9/2)+	2 15.4 NS 13
219RN 3				0.014 (7/2)+	3 875 PS 30
219RN 4				0.127 (11/2)+	4 402 PS 20
219RN 5				0.159 (7/2)+	5 42.3 PS 50
219RN 6	0.269	3/2+			6 14.2 PS 23
219RN 7				0.338 (5/2)+	7 6.1 PS 28
219RN 8				0.343 (5/2,7/2)-	8
219RN 9				0.376 (9/2)+	9 6.9 PS 38
219RN 10				0.377 (7/2,9/2)-	10

219RN 11				0.397	11
219RN 12				0.445 (5/2)+	12 6.2 PS 31
219RN 13				0.447 (5/2)-	13
219RN 14				0.491 (5/2,7/2,9/2)-	14
219RN 15				0.514 (9/2+)	15
219RN 16				0.518	16
219RN 17				0.542 (7/2+)	17
219RN 18				0.594 (7/2)-	18
219RN 19				0.599 (5/2,7/2,9/2)+	19
219RN 20				0.624 (5/2+,7/2,9/2+)	20

219RN 21				0.646 (5/2+,7/2)	21
219RN 22				0.673	22
219RN 23				0.711 (3/2:9/2+)	23
219RN 24				0.733 (5/2+,7/2)	24
219RN 25				0.748	25
219RN 26				0.773	26
219RN 27				0.800	27
219RN 28				0.830	28
219RN 29				0.851	29
219RN 30				0.861	30

219RN 31				0.873	31

S-p = 6.560 (0.012)-----

S-n = 4.459 (0.003)-----

S-2p = 11.632 (0.007)-----

S-2n = 10.972 (0.005)-----
S-alpha= -6.946 (0.003)-----

S+p = -4.636 (0.005)
S+n = -6.289 (0.003)
S+2p = -10.443 (0.005)
S+2n = -10.501 (0.006)
S+alpha = 5.979 (0.003)

gap p = 1.924 (0.013)
gap n = -1.829 (0.004)
gap 2p = 1.189 (0.009)
gap 2n = 0.471 (0.008)
gap alpha = -0.967 (0.004)