

^{221}Ra $Z = 88$ $N = 133$ adopted link ENSDF link

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

BE = 1701.951 (0.005) MeV

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

S-alpha=	-6.880	(0.006)	-----		
221RA 1	0.000	5/2+			1 28 S 2
221RA 2				0.053 (7/2)+	2
221RA 3				0.104 (5/2)-	3
221RA 4				0.122 (9/2+)	4
221RA 5				0.147 (7/2)-	5
221RA 6				0.174	6
221RA 7				0.211 (11/2+)	7
221RA 8				0.299 (7/2)+	8
221RA 9				0.319 (13/2+)	9
221RA 10				0.321 (3/2)+	10

221RA 11				0.342 (13/2-)	11
221RA 12				0.359 (5/2)+	12
221RA 13				0.438 (15/2+)	13
221RA 14				0.440 (15/2-)	14
221RA 15				0.450 (5/2-)	15
221RA 16				0.485 (3/2-, 5/2-)	16
221RA 17				0.566 (17/2-)	17
221RA 18				0.573 (17/2+)	18
221RA 19				0.688 (19/2-)	19
221RA 20				0.712 (19/2+)	20

221RA 21				0.850 (21/2-)	21
221RA 22				0.867 (21/2+)	22
221RA 23				0.990 (23/2-)	23
221RA 24				1.026 (23/2+)	24
221RA 25				1.181 (25/2-)	25
221RA 26				1.197 (25/2+)	26
221RA 27				1.344 (27/2-)	27
221RA 28				1.376 (27/2+)	28

S-p = 5.807 (0.006)-----

S-n = 5.380 (0.009)-----

S-2p = 10.443 (0.005)-----

S-2n = 12.573 (0.008)-----

S-alpha= -6.880 (0.006)-----

S+p = -3.631 (0.007)

S+n = -6.715 (0.006)

S+2p = -8.156 (0.009)
S+2n = -11.873 (0.005)
S+alpha = 6.922 (0.007)

gap p = 2.176 (0.009)
gap n = -1.335 (0.011)
gap 2p = 2.287 (0.011)
gap 2n = 0.699 (0.010)
gap alpha = 0.041 (0.009)