

^{220}Ra $Z = 88$ $N = 132$ [link to full NNDC output](#)

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

BE = 1696.573 (0.008) MeV

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

S-alpha=	-7.593	(0.010)	-----		
220RA 1	0.000	0+			1 18 MS 2
220RA 2	0.178	2+			2
220RA 3	0.410	4+			3
220RA 4				0.413 (1-)	4
220RA 5				0.474 (3-)	5
220RA 6				0.635 (5-)	6
220RA 7	0.688	6+			7
220RA 8				0.873 (7-)	8
220RA 9	1.001	8+			9
220RA 10				1.164 (9-)	10

220RA 11	1.343	10+			11
220RA 12				1.496 (11-)	12
220RA 13	1.711	12+			13
220RA 14				1.864 (13-)	14
220RA 15	2.106	14+			15
220RA 16				2.263 (15-)	16
220RA 17	2.523	16+			17
220RA 18				2.690 (17-)	18
220RA 19	2.962	18+			19
220RA 20				3.145 (19-)	20

220RA 21				3.418 (20+)	21
220RA 22				3.624 (21-)	22
220RA 23				3.889 (22+)	23
220RA 24				4.123 (23-)	24
220RA 25				4.375 (24+)	25
220RA 26				4.636 (25-)	26
220RA 27				4.874 (26+)	27
220RA 28				5.164 (27-)	28
220RA 29				5.385 (28+)	29

S-p =	5.637	(0.011)	-----		
220RA 30				5.703 (29-)	30

220RA 31				5.912 (30+)	31
220RA 32				6.255 (31-)	32

S-p = 5.637 (0.011)-----
S-n = 7.195 (0.012)-----

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S-2p = 9.525 ( 0.008)-----  
S-2n = 12.523 ( 0.014)-----  
S-alpha= -7.593 ( 0.010)-----  
  
S+p = -3.036 ( 0.051)  
S+n = -5.378 ( 0.009)  
S+2p = -7.645 ( 0.015)  
S+2n = -12.093 ( 0.009)  
S+alpha = 7.299 ( 0.013)  
  
gap p = 2.601 ( 0.052)  
gap n = 1.818 ( 0.015)  
gap 2p = 1.880 ( 0.017)  
gap 2n = 0.431 ( 0.017)  
gap alpha = -0.294 ( 0.016)
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