

$^{222}\text{Ra}$        $Z = 88$        $N = 134$       [link to full NNDC output](#)

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

BE = 1708.666 ( 0.004) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-6.678 ( 0.005)				
222RA 1	0.000	0+			1 38.0 S 5
222RA 2	0.111	2+			2 0.52 NS 4
222RA 3			0.242	1-	3 1.2 NS LT
222RA 4	0.301	4+			4 1.4 NS LT
222RA 5			0.317	3-	5
222RA 6				0.474 (5-)	6
222RA 7				0.550 (6+)	7
222RA 8				0.703 (7-)	8
222RA 9				0.843 (8+)	9
222RA 10				0.914 (0+)	10
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222RA 11				0.992 (9-)	11
222RA 12	1.025	2+			12
222RA 13				1.171 (3-,4+)	13
222RA 14				1.172 1+,1-,2+	14
222RA 15				1.173 (10+)	15
222RA 16				1.225 1+,1-,2+	16
222RA 17				1.265 (2+,3)	17
222RA 18				1.310	18
222RA 19				1.331 (11-)	19
222RA 20				1.361	20
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222RA 21				1.376	21
222RA 22				1.403 (3-)	22
222RA 23				1.433 1,2,3-	23
222RA 24				1.440 (3-)	24
222RA 25				1.500 1-,2,3-	25
222RA 26				1.537 (12+)	26
222RA 27	1.556	2+			27
222RA 28				1.620	28
222RA 29				1.645 2+,3-	29
222RA 30				1.710 (13-)	30
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222RA 31			1.754	3-	31
222RA 32				1.821 1,2,3	32
222RA 33				1.841 1,2,3	33
222RA 34				1.933 (14+)	34
222RA 35				2.125 (15-)	35
222RA 36				2.359 (16+)	36
222RA 37				2.570 (17-)	37

222RA	38				2.811	(18+)	38
222RA	39				3.041	(19-)	39
222RA	40				3.288	(20+)	40

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S-p = 6.246 ( 0.007)-----

S-n = 6.715 ( 0.006)-----

S-2p = 10.870 ( 0.005)-----

S-2n = 12.093 ( 0.009)-----

S-alpha= -6.678 ( 0.005)-----

S+p = -3.783 ( 0.008)

S+n = -5.158 ( 0.005)

S+2p = -8.905 ( 0.011)

S+2n = -11.637 ( 0.005)

S+alpha = 6.452 ( 0.006)

gap p = 2.463 ( 0.011)

gap n = 1.557 ( 0.008)

gap 2p = 1.965 ( 0.012)

gap 2n = 0.456 ( 0.010)

gap alpha = -0.225 ( 0.008)