

^{218}Ra $Z = 88$ $N = 130$ [link to full NNDC output](#)

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

BE = 1684.050 (0.011) MeV

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

S-alpha=	-8.546	(0.014)	-----		
218RA 1	0.000	0+			1 25.2 US 3
218RA 2	0.389	2+			2 29.8 PS 28
218RA 3	0.741	4+			3 19.4 PS 35
218RA 4			0.793	3-	4
218RA 5			1.038	5-	5
218RA 6	1.122	6+			6 13.2 PS 28
218RA 7			1.341	7-	7 3.1 PS 4
218RA 8	1.547	8+			8 2.3 PS 3
218RA 9				1.573 (3-,4,5-)	9
218RA 10			1.694	9-	10 5.9 PS 6

218RA 11				1.715	11
218RA 12				1.726	12
218RA 13				1.804	13
218RA 14				1.856	14
218RA 15				1.897	15
218RA 16	1.962	10+			16 2.6 PS 4
218RA 17				2.032	17
218RA 18			2.109	11-	18 4.2 PS 5
218RA 19				2.328	19
218RA 20	2.391	12+			20 1.4 PS LT

218RA 21				2.420 (12-)	21
218RA 22				2.442	22
218RA 23				2.466	23
218RA 24			2.526	13-	24 4.9 PS LT
218RA 25	2.826	14+			25 1.4 PS LT
218RA 26			2.966	15-	26 1.4 PS LT
218RA 27				2.967 (14-)	27
218RA 28	3.285	16+			28
218RA 29				3.388 (16-)	29
218RA 30			3.389	17-	30 13 PS LT

218RA 31				3.720 (18-)	31
218RA 32	3.756	18+			32
218RA 33			3.806	19-	33
218RA 34				4.118 (20-)	34
218RA 35				4.191 (20+)	35
218RA 36				4.213 (21-)	36
218RA 37				4.392 (21+)	37

218RA 38				4.588	(22+)	38
218RA 39				4.675	(23-)	39
218RA 40				4.683	(22-)	40

218RA 41				4.835	(23+)	41
S-p	=	4.953	(0.013)	-----		
218RA 42				5.020	(24+)	42
218RA 43				5.125	(25-)	43
218RA 44				5.139	(24-)	44
218RA 45				5.364	(25+)	45
218RA 46				5.470	(26+)	46
218RA 47				5.588	(27-)	47
218RA 48				5.902	(28+)	48
218RA 49				6.135	(29-)	49
218RA 50				6.344	(30+)	50

218RA 51				6.679	(31-)	51

S-p	=	4.953	(0.013)	-----		
S-n	=	7.310	(0.013)	-----		
S-2p	=	8.180	(0.013)	-----		
S-2n	=	12.783	(0.014)	-----		
S-alpha	=	-8.546	(0.014)	-----		
S+p	=	-2.371	(0.052)			
S+n	=	-5.328	(0.014)			
S+2p	=	-6.560	(0.025)			
S+2n	=	-12.523	(0.014)			
S+alpha	=	8.127	(0.017)			
gap p	=	2.582	(0.053)			
gap n	=	1.982	(0.019)			
gap 2p	=	1.620	(0.028)			
gap 2n	=	0.259	(0.020)			
gap alpha	=	-0.419	(0.022)			