

$^{218}\text{Ra}$        $Z = 88$        $N = 130$       adopted link      ENSDF link

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

BE = 1684.055 ( 0.010) MeV

	Energy T	J+		J-		J-other		T1/2	
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S-alpha=	-8.540	( 0.013)	-----						
218RA 1	0.000	0+						1	25.91 US 14
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						0.853	(1-)	5	
218RA 6				1.038	5-			6	
218RA 7	1.122	6+						7	13.2 PS 28
218RA 8				1.341	7-			8	
218RA 9	1.547	8+						9	
218RA 10						1.573	(3-,4,5-)	10	
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218RA 11				1.694	9-			11	
218RA 12						1.715		12	
218RA 13						1.726		13	
218RA 14						1.804		14	
218RA 15						1.856		15	
218RA 16						1.897		16	
218RA 17	1.962	10+						17	
218RA 18						2.032		18	
218RA 19				2.109	11-			19	
218RA 20						2.328		20	
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218RA 21	2.391	12+						21	1.4 PS LT
218RA 22						2.420	(12-)	22	
218RA 23						2.442		23	
218RA 24						2.466		24	
218RA 25				2.526	13-			25	4.9 PS LT
218RA 26	2.826	14+						26	1.4 PS LT
218RA 27				2.966	15-			27	1.4 PS LT
218RA 28						2.967	(14-)	28	
218RA 29	3.285	16+						29	
218RA 30						3.388	(16-)	30	
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218RA 31				3.389	17-			31	13 PS LT
218RA 32						3.720	(18-)	32	
218RA 33	3.756	18+						33	
218RA 34				3.806	19-			34	
218RA 35						4.118	(20-)	35	
218RA 36						4.191	(20+)	36	
218RA 37						4.213	(21-)	37	

218RA	38				4.392	(21+)	38
218RA	39				4.588	(22+)	39
218RA	40				4.675	(23-)	40
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218RA	41				4.683	(22-)	41
218RA	42				4.835	(23+)	42
S-p	=	4.958	( 0.012)	-----			
218RA	43				5.020	(24+)	43
218RA	44				5.125	(25-)	44
218RA	45				5.139	(24-)	45
218RA	46				5.364	(25+)	46
218RA	47				5.470	(26+)	47
218RA	48				5.588	(27-)	48
218RA	49				5.902	(28+)	49
218RA	50				6.135	(29-)	50
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218RA	51				6.344	(30+)	51
218RA	52				6.679	(31-)	52

S-p = 4.958 ( 0.012)-----  
 S-n = 7.315 ( 0.012)-----  
 S-2p = 8.186 ( 0.011)-----  
 S-2n = 12.789 ( 0.013)-----  
 S-alpha= -8.540 ( 0.013)-----

S+p = -2.365 ( 0.052)  
 S+n = -5.323 ( 0.012)  
 S+2p = -6.534 ( 0.017)  
 S+2n = -12.516 ( 0.012)  
 S+alpha = 8.133 ( 0.014)

gap p = 2.593 ( 0.054)  
 gap n = 1.992 ( 0.017)  
 gap 2p = 1.652 ( 0.020)  
 gap 2n = 0.273 ( 0.018)  
 gap alpha = -0.408 ( 0.020)