

$^{219}\text{Ra}$        $Z = 88$        $N = 131$       adopted link      ENSDF link

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

BE = 1689.378 ( 0.007) MeV

Qbeta+ = 0.777 ( 0.010) MeV

	Energy T	J+	J-	J-other	T1/2
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S-alpha=	-8.138 ( 0.009)				
219RA 1				0.000 (7/2+)	1 9 MS 2
219RA 2				0.017 (11/2+)	2 10 MS 3
219RA 3				0.052 (3/2+)	3
219RA 4				0.114 (9/2+)	4
219RA 5				0.140 (5/2+)	5
219RA 6				0.152 (7/2+)	6
219RA 7				0.251 (15/2+)	7
219RA 8				0.272	8
219RA 9				0.321 (3/2+,5/2,7/2+)	9
219RA 10				0.328 (1/2+:7/2+)	10
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219RA 11				0.405 (3/2+,5/2,7/2+)	11)
219RA 12				0.422	12
219RA 13				0.445 (5/2+,7/2,9/2+)	13
219RA 14				0.471 (5/2+:11/2+)	14
219RA 15				0.475 (13/2+)	15
219RA 16				0.512 (17/2-)	16
219RA 17				0.515	17
219RA 18				0.546 (19/2+)	18
219RA 19				0.556 (13/2+)	19
219RA 20				0.604 (15/2-)	20
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219RA 21				0.751 (21/2-)	21
219RA 22				0.780 (15/2-)	22
219RA 23				0.854 (17/2+)	23
219RA 24				0.877 (17/2+)	24
219RA 25				0.893 (23/2+)	25
219RA 26				0.938 (19/2-)	26
219RA 27				1.053 (25/2-)	27
219RA 28				1.131 (19/2-)	28
219RA 29				1.246 (21/2+)	29
219RA 30				1.257 (21/2+)	30
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219RA 31				1.288 (27/2+)	31
219RA 32				1.325 (23/2-)	32
219RA 33				1.411 (29/2-)	33
219RA 34				1.426	34
219RA 35				1.504 (23/2-)	35
219RA 36				1.638 (25/2+)	36

219RA 37				1.672	(25/2+)	37
219RA 38				1.702	(31/2)+	38
219RA 39				1.738	(27/2-)	39
219RA 40				1.833	(33/2-)	40
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219RA 41				1.933	(27/2-)	41
219RA 42				2.039	(29/2+)	42
219RA 43				2.130	(35/2+)	43
219RA 44				2.153	(31/2-)	44
219RA 45				2.290	(37/2-)	45
219RA 46				2.460	(33/2+)	46
219RA 47				2.568	(35/2-)	47
219RA 48				2.580	(39/2+)	48
219RA 49				2.768	(41/2-)	49
219RA 50				2.888	(37/2+)	50
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219RA 51				3.003	(39/2-)	51
219RA 52				3.046	(43/2+)	52
219RA 53				3.273	(45/2-)	53
219RA 54				3.320	(41/2+)	54
219RA 55				3.451	(43/2-)	55
219RA 56				3.523	(47/2+)	56
219RA 57				3.776	(45/2+)	57
219RA 58				3.793	(49/2-)	58
219RA 59				3.914	(47/2-)	59
219RA 60				4.025	(51/2+)	60
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219RA 61				4.325	(53/2-)	61
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S-p	=	4.955	( 0.008)	-----		
S-n	=	5.323	( 0.012)	-----		
S-2p	=	8.843	( 0.008)	-----		
S-2n	=	12.638	( 0.010)	-----		
S-alpha	=	-8.138	( 0.009)	-----		
S+p	=	-2.939	( 0.009)			
S+n	=	-7.193	( 0.010)			
S+2p	=	-7.032	( 0.011)			
S+2n	=	-12.573	( 0.008)			
S+alpha	=	7.567	( 0.010)			
gap p	=	2.016	( 0.012)			
gap n	=	-1.870	( 0.016)			
gap 2p	=	1.811	( 0.013)			
gap 2n	=	0.066	( 0.013)			
gap alpha	=	-0.571	( 0.014)			