

$^{111}\text{Rh}$        $Z = 45$        $N = 66$       adopted link      ENSDF link

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

BE = 943.015 ( 0.007) MeV

Qbeta- = 3.682 ( 0.007) MeV

	Energy T	J+	J-	J-other	T1/2	
111RH	1			0.000 (7/2+)	1	11 S 1
111RH	2			0.212 (9/2+)	2	0.5 NS LT
111RH	3			0.303 (3/2+)	3	0.5 NS LT
111RH	4			0.382 (5/2+)	4	0.3 NS 2
111RH	5			0.395 (3/2+)	5	87 NS 8
111RH	6			0.417	6	
111RH	7			0.440 (1/2+)	7	4.8 NS 5
111RH	8			0.491 (11/2+)	8	
111RH	9			0.493 (1/2-)	9	6.8 NS 4
111RH	10			0.567 (7/2+)	10	
111RH	11			0.586	11	
111RH	12			0.608 (11/2+)	12	
111RH	13			0.632 (7/2+)	13	0.5 NS LT
111RH	14			0.661	14	
111RH	15			0.663 (5/2+)	15	0.5 NS LT
111RH	16			0.681 (3/2-)	16	
111RH	17			0.685	17	
111RH	18			0.715 (13/2+)	18	
111RH	19			0.733 (5/2-)	19	
111RH	20			0.860 (3/2-)	20	
111RH	21			0.923 (11/2+)	21	
111RH	22			0.936	22	
111RH	23			0.960 (3/2,5/2)	23	
111RH	24			0.977 (5/2-)	24	
111RH	25			1.018 (3/2)	25	
111RH	26			1.019 (13/2+)	26	
111RH	27			1.039 (5/2,7/2)	27	
111RH	28			1.045 (9/2+)	28	
111RH	29			1.055	29	
111RH	30			1.096 (3/2,5/2)	30	
111RH	31			1.158 (15/2+)	31	
111RH	32			1.160 (3/2,5/2,7/2)	32	
111RH	33			1.168 (9/2-)	33	
111RH	34			1.349 (3/2,5/2,7/2)	34	
111RH	35			1.373 (15/2+)	35	
111RH	36			1.382 (17/2+)	36	
111RH	37			1.444 (15/2+)	37	

111RH 38				1.548	(17/2+)	38
111RH 39				1.759	(13/2-)	39
111RH 40				1.780		40
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111RH 41				1.898	(5/2,7/2)	41
111RH 42				1.932	(19/2+)	42
111RH 43				1.950	(19/2+)	43
111RH 44				2.034	(5/2,7/2)	44
111RH 45				2.112	(19/2,21/2)	45
111RH 46				2.112	(19/2+)	46
111RH 47				2.127	(3/2+)	47
111RH 48				2.156	(21/2+)	48
111RH 49				2.215	(3/2+,5/2+,7/2+)	49
111RH 50				2.354	(21/2,23/2)	50
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111RH 51				2.603	(23/2+)	51
111RH 52				2.650	(23/2,25/2)	52
111RH 53				2.732	(23/2+)	53
111RH 54				2.893	(25/2+)	54
111RH 55				2.904	(23/2+)	55
111RH 56				2.964	(25/2,27/2)	56
111RH 57				3.271	(27/2+)	57
111RH 58				3.324	(27/2,29/2)	58
111RH 59				3.523	(29/2+)	59
111RH 60				3.742	(29/2,31/2)	60
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111RH 61				3.932	(31/2+)	61
111RH 62				4.248	(33/2+)	62

S-p = 9.520 ( 0.011)-----  
S-n = 7.547 ( 0.019)-----  
S-2p = 22.599 ( 0.012)-----  
S-2n = 13.447 ( 0.008)-----  
S-alpha= 5.979 ( 0.011)-----

S+p = -11.306 ( 0.009)  
S+n = -5.498 ( 0.045)  
S+2p = -19.301 ( 0.018)  
S+2n = -12.606 ( 0.010)  
S+alpha = -5.104 ( 0.020)

gap p = -1.786 ( 0.015)  
gap n = 2.048 ( 0.049)  
gap 2p = 3.298 ( 0.022)  
gap 2n = 0.842 ( 0.013)  
gap alpha = 0.875 ( 0.022)