

^{104}Ru $Z = 44$ $N = 60$ adopted link ENSDF link

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

BE = 893.090 (0.002) MeV

	Energy T	J+	J-	J-other	T1/2
104RU 1	0.000	0+			1 STABLE
104RU 2	0.358	2+			2 56.4 PS 10
104RU 3	0.888	4+			3 5.6 PS 6
104RU 4	0.893	2+			4 5.0 PS 5
104RU 5	0.988	0+			5 7.9 PS 9
104RU 6	1.242	3+			6
104RU 7	1.335	0+			7 0.90 PS 5
104RU 8	1.503	4+			8 2.7 PS 3
104RU 9	1.515	2+			9 1.2 PS 2
104RU 10	1.556	6+			10 1.33 PS +12-4
104RU 11				1.750 (2+)	11
104RU 12				1.872 (5+)	12
104RU 13			1.970 3-		13
104RU 14				1.975 (6-,7)	14
104RU 15				2.004	15
104RU 16	2.035	2+			16
104RU 17	2.081	4+			17 0.7 PS +3-2
104RU 18				2.095 (2+,4+)	18
104RU 19				2.197 (6+)	19
104RU 20				2.233 (5-)	20
104RU 21				2.269 (3,4)	21
104RU 22	2.285	2+			22
104RU 23	2.320	8+			23 0.56 PS +5-10
104RU 24				2.329 (1,2,3)	24
104RU 25				2.374 (3,1)	25
104RU 26				2.430	26
104RU 27				2.443	27
104RU 28			2.482 3-		28
104RU 29				2.490	29
104RU 30				2.524	30
104RU 31				2.597	31
104RU 32				2.601 (6-)	32
104RU 33				2.614 (7-)	33
104RU 34				2.619	34
104RU 35				2.623 (7+)	35
104RU 36				2.628	36
104RU 37				2.630	37
104RU 38				2.758	38

104RU 39				2.760		39
104RU 40				2.823		40

104RU 41				2.848	(8+)	41 2.1 PS +13-4
104RU 42				2.861		42
104RU 43				2.928	(8-)	43
104RU 44				3.036		44
104RU 45				3.075		45
104RU 46				3.075	(9-)	46
104RU 47		3.112	10+			47
104RU 48				3.285	(10+)	48 0.26 PS +16-7
104RU 49				3.334		49
104RU 50				3.384		50

104RU 51				3.414		51
104RU 52				3.443		52
104RU 53				3.473	(10-)	53
104RU 54				3.502		54
104RU 55				3.507		55
104RU 56				3.583		56
104RU 57				3.584		57
104RU 58				3.618		58
104RU 59				3.677		59
104RU 60				3.691	(11-)	60

104RU 61				3.713	(12+)	61
104RU 62				3.875		62
104RU 63				3.919		63
104RU 64				4.164	(12-)	64
104RU 65				4.170		65
104RU 66				4.264		66
104RU 67				4.268		67

S-alpha=	4.328	(0.003)	-----			
104RU 68				4.439	(14+)	68
104RU 69				4.443	(13-)	69
104RU 70				5.357	(16+)	70

S-p = 10.781 (0.010)-----
S-n = 8.900 (0.003)-----
S-2p = 19.113 (0.009)-----
S-2n = 15.132 (0.003)-----
S-alpha= 4.328 (0.003)-----

S+p = -7.044 (0.004)
S+n = -5.910 (0.004)
S+2p = -16.390 (0.003)
S+2n = -14.370 (0.006)
S+alpha = -3.853 (0.003)

gap p = 3.736 (0.011)
gap n = 2.990 (0.004)
gap 2p = 2.723 (0.009)
gap 2n = 0.762 (0.006)
gap alpha = 0.474 (0.004)