

$^{96}\text{Ru}$        $Z = 44$        $N = 52$       adopted link      ENSDF link

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

BE = 826.504 ( 0.000) MeV

	Energy T	J+	J-	J-other	T1/2
96RU 1	0.000	0+			1 STABLE
96RU 2	0.833	2+			2 2.94 PS 6
96RU 3	1.518	4+			3 6.9 PS 5
S-alpha= 1.697 ( 0.000)					
96RU 4	1.931	2+			4 0.38 PS 3
96RU 5	2.149	0+			5 0.46 PS +63-18
96RU 6	2.150	6+			6 15 PS 5
96RU 7	2.284	2+			7 0.15 FS 5
96RU 8				2.462 4	8 0.10 PS +5-3
96RU 9				2.525 3+,4+	9 0.4 PS LT
96RU 10				2.528 1+,2+	10
96RU 11				2.576 (2+)	11
96RU 12				2.579 1+,2+,3+	12
96RU 13			2.588 5-		13 2.8 PS GE
96RU 14				2.650 3(-)	14
96RU 15				2.700 4+,5	15
96RU 16				2.740 (2+)	16 0.4 PS LT
96RU 17				2.760 (4+,5)	17 0.12 PS LT
96RU 18				2.794 (5,6)	18
96RU 19				2.851 (2+,3)	19 0.14 PS +10-5
96RU 20	2.892	6+			20 0.20 PS LT
96RU 21				2.898 3(+)	21 0.4 PS LT
96RU 22	2.950	8+			22 11 PS 4
96RU 23				2.988 (0,4)	23
96RU 24				2.996 2+,3+,4+	24
96RU 25				3.060 (1,4)	25
96RU 26				3.072 (3-,4)	26
96RU 27			3.076 3-		27
96RU 28				3.077 (5,6)	28
96RU 29	3.090	2+			29 0.13 PS LT
96RU 30				3.154 1(+)	30 3.12 FS 14
96RU 31				3.167 (5,6)	31
96RU 32				3.172 (9+)	32
96RU 33				3.210 (2,6)	33
96RU 34				3.232 (0,4)	34
96RU 35	3.261	2+			35
96RU 36				3.281 (3,7)	36
96RU 37				3.282 1	37 49.2 FS 35

96RU	38			3.291	7-			38	7.1 PS	9
96RU	39	3.292	4+					39	0.4 PS	LT
96RU	40					3.307	5	40		
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96RU	41					3.363	(4,8)	41		
96RU	42	3.378	5+					42		
96RU	43					3.381	(6,7)+	43		
96RU	44					3.448	1	44	126 FS	21
96RU	45					3.480	1	45	35.3 FS	28
96RU	46					3.545	(6,7)	46		
96RU	47					3.707	(5,6)+	47		
96RU	48					3.743	(5,6)	48		
96RU	49					3.755	(5,6,7)+	49		
96RU	50					3.806	(5,6,7)	50		
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96RU	51	3.817	10+					51	3.5 PS	4
96RU	52					3.887	(5,6,7)+	52		
96RU	53					3.929	(10+)	53		
96RU	54			3.951	9-			54	8.3 PS	8
96RU	55					4.058	(5,6)	55		
96RU	56					4.080	(5,6,7)+	56		
96RU	57					4.113	(6,7)+	57		
96RU	58					4.148	(5,6,7)	58		
96RU	59					4.211	(5,6,7)	59		
96RU	60					4.262	(8,12)	60		
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96RU	61					4.265	(11+)	61		
96RU	62	4.418	12+					62	21 PS	3
96RU	63					4.521	(5,6)+	63		
96RU	64			4.534	10-			64		
96RU	65					4.561	(5,6)+	65		
96RU	66					4.593	(5,6,7)	66		
96RU	67					4.599		67		
96RU	68					4.711	(12+)	68		
96RU	69	4.777	5+					69		
96RU	70					4.799	11(-)	70	2.6 PS	5
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96RU	71					4.866	(10,14)	71		
96RU	72	4.950	5+					72		
96RU	73					5.274	(9,13)	73		
96RU	74					5.532	(13+)	74		
96RU	75					5.534	(11-)	75		
96RU	76					5.541	(5,6,7)+	76		
96RU	77	5.681	14+					77	2.43 PS	21
96RU	78					5.750	13(-)	78	2.1 PS	4
96RU	79					5.978	(14+)	79		
96RU	80					5.995	(9,13)	80		
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96RU	81					6.278	14(-)	81		
96RU	82	6.442	16+					82	7.4 PS	LE

96RU 83						6.679	(14,18)	83
96RU 84						6.754	15(-)	84
96RU 85						6.770	(14,18)	85
96RU 86						6.777	16(-)	86
S-p	=	7.348	( 0.005)	-----				
96RU 87						7.415	(17+)	87
96RU 88						7.425	(16+)	88
96RU 89						7.535	(17+)	89
96RU 90						7.558	17(-)	90
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96RU 91						7.951	17(-)	91 4.2 PS LE
96RU 92						8.188	(17+)	92
96RU 93		8.206	18+					93
96RU 94						8.236	18(-)	94
96RU 95						8.500	(17+)	95
96RU 96						8.644	(18+)	96
96RU 97						8.736	(18+)	97
96RU 98						8.969	(18+)	98
96RU 99						9.101	(18+)	99
96RU 100						9.249	(20+)	100
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96RU 101						9.250	(18-)	101
96RU 102						9.391	(19-)	102
96RU 103						9.586	(20+)	103
96RU 104						9.665	(19-)	104
96RU 105						9.713	(19+)	105
96RU 106						9.852	(20+)	106
96RU 107						9.892	(21-)	107
96RU 108						9.992	(21-)	108
96RU 109						9.997	(21+)	109
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S-p	=	7.348	( 0.005)	-----				
S-n	=	10.694	( 0.010)	-----				
S-2p	=	12.244	( 0.000)	-----				
S-2n	=	19.639	( 0.003)	-----				
S-alpha	=	1.697	( 0.000)	-----				
S+p	=	-3.806	( 0.035)					
S+n	=	-8.112	( 0.003)					
S+2p	=	-9.819	( 0.005)					
S+2n	=	-18.287	( 0.006)					
S+alpha	=	-1.557	( 0.018)					
gap p	=	3.542	( 0.036)					
gap n	=	2.582	( 0.010)					
gap 2p	=	2.426	( 0.005)					
gap 2n	=	1.352	( 0.007)					
gap alpha	=	0.139	( 0.018)					