^{102}Ru $Z = 44$ $N = 58$ adopted link ENSDF link

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

BE = 877.958 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
102RU 1	0.000	0+		1	STABLE
102RU 2	0.475	2+		2	18.4 PS 3
102RU 3	0.944	0+		3	25 PS 4
102RU 4	1.103	2+		4	4.0 PS 5
102RU 5	1.106	4+		5	3.0 PS 5
102RU 6	1.522	3+		6	
102RU 7	1.581	2+		7	
102RU 8			1.603 (3,4+)	8	
102RU 9	1.799	4+		9	
102RU 10	1.837	0+		10	
102RU 11	1.873	6+		11	1.1 PS 4
102RU 12			1.968 (0)+	12	
102RU 13	2.037	2+		13	
102RU 14			2.043 3-	14	
102RU 15			2.153	15	
102RU 16			2.190	16	
102RU 17	2.219	5+		17	
102RU 18			2.241	18	
102RU 19			2.261 2-	19	
102RU 20			2.303 (4)	20	
102RU 21			2.367 (3-)	21	
102RU 22			2.373 5-	22	
102RU 23			2.386	23	
102RU 24			2.420 (3,4+)	24	
102RU 25			2.442 (3,4+)	25	
102RU 26			2.460	26	
102RU 27			2.467	27	
102RU 28			2.567	28	
102RU 29	2.586	6+		29	
102RU 30			2.592	30	
102RU 31			2.615 (3,4+)	31	
102RU 32			2.650 6-	32	
102RU 33			2.676 (0,1,2)+	33	
102RU 34			2.701 (3,4+)	34	
102RU 35	2.706	8+		35	0.9 PS 3
102RU 36			2.706 (7-)	36	
102RU 37			2.711	37	
102RU 38			2.719 (3,4+)	38	

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102RU  39 |                |                |   2.790                    39
102RU  40 |                |                |   2.801                    40
----------                                                              ----------
102RU  41 |                |                |   2.814     (3,4+)         41
102RU  42 |                |                |   2.823                    42
102RU  43 |                |                |   2.878                    43
102RU  44 |                |                |   2.899                    44
102RU  45 |                |                |   2.909     (0,1,2)+       45
102RU  46 |                |                |   2.914     (3,4+)         46
102RU  47 |                |                |   2.937     (7-)           47
102RU  48 |                |                |   2.942     (8-)           48
102RU  49 |                |                |   2.945                    49
102RU  50 |                |                |   2.946                    50
----------                                                              ----------
102RU  51 |                |                |   2.956                    51
102RU  52 |                |                |   2.967                    52
102RU  53 |                |                |   3.010     (3,4+)         53
102RU  54 |  3.035     7+  |                |                            54
102RU  55 |                |                |   3.057                    55
102RU  56 |                |                |   3.086                    56
102RU  57 |                |                |   3.138     (9-)           57
102RU  58 |                |                |   3.157                    58
102RU  59 |                |                |   3.234                    59
102RU  60 |                |                |   3.245                    60
----------                                                              ----------
102RU  61 |                |                |   3.328     (8-)           61
102RU  62 |                |                |   3.347                    62
102RU  63 |                |                |   3.389                    63
102RU  64 |                |                |   3.395     (8+)           64
S-alpha=   3.415 ( 0.000)-------------------------------------------------------------------------
102RU  65 |  3.434     10+ |                |                            65  1.7 PS    6
102RU  66 |                |                |   3.450                    66
102RU  67 |                |                |   3.457     (9-)           67
102RU  68 |                |                |   3.469                    68
102RU  69 |                |                |   3.538     (10-)          69
102RU  70 |                |                |   3.549                    70
----------                                                              ----------
102RU  71 |                |                |   3.577                    71
102RU  72 |                |                |   3.680                    72
102RU  73 |                |                |   3.689                    73
102RU  74 |                |                |   3.700                    74
102RU  75 |                |                |   3.718                    75
102RU  76 |                |                |   3.733                    76
102RU  77 |                |                |   3.741                    77
102RU  78 |                |                |   3.749                    78
102RU  79 |                |                |   3.759                    79
102RU  80 |                |                |   3.772                    80
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102RU  81 |                |                |   3.782                    81
102RU  82 |                |                |   3.791                    82
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102RU	83				3.820	(11-)	83	
102RU	84				3.841		84	
102RU	85				3.859	(10)+	85	
102RU	86				3.876		86	
102RU	87				3.886		87	
102RU	88	3.917	9+				88	
102RU	89				3.937		89	
102RU	90				3.973		90	
102RU	91				4.013	(10-)	91	
102RU	92				4.034		92	
102RU	93	4.056	12+				93	2.5 PS 7
102RU	94				4.066		94	
102RU	95				4.081		95	
102RU	96				4.088		96	
102RU	97				4.114		97	
102RU	98				4.125		98	
102RU	99				4.179		99	
102RU	100				4.180		100	
102RU	101				4.184	(11-)	101	
102RU	102				4.295	(10+)	102	
102RU	103				4.365	(12-)	103	
102RU	104				4.615		104	
102RU	105				4.711	(13-)	105	
102RU	106				4.720	(12)+	106	
102RU	107				4.755	(11+)	107	
102RU	108	4.808	14+				108	0.9 PS 3
102RU	109				4.840	(12-)	109	
102RU	110				5.070	(13-)	110	
102RU	111				5.370	(14-)	111	
102RU	112				5.678	(14)+	112	
102RU	113	5.725	16+				113	
102RU	114				5.758	(15-)	114	
102RU	115				5.767	(14-)	115	
102RU	116				6.058	(15-)	116	
102RU	117				6.081	(14+)	117	
102RU	118				6.507	(16-)	118	
102RU	119				6.725	(16-)	119	
102RU	120	6.790	18+				120	
102RU	121				6.918	(17-)	121	
102RU	122				7.001	(16+)	122	
102RU	123				7.118	(17-)	123	
102RU	124				7.750	(18-)	124	
102RU	125	7.998	20+				125	
102RU	126				8.054	(18+)	126	
102RU	127				8.126	(19-)	127	
102RU	128				8.247	(19-)	128	

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102RU 129 |                |                |   9.037     (20-)          129
102RU 130 |                |                |   9.220                    130
----------                                                                 -----------------
S-n    =   9.220 ( 0.001)-------------------------------------------------------------------------
102RU 131 |                |                |   9.249     (20+)          131
102RU 132 |  9.304     22+  |                |                            132
102RU 133 |                |                |   9.370     (21-)          133
102RU 134 |                |                |   9.510     (21-)          134


S-p    =  10.051 ( 0.024)-------------------------------------------------------------------------
S-n    =   9.220 ( 0.001)-------------------------------------------------------------------------
S-2p   =  17.491 ( 0.001)-------------------------------------------------------------------------
S-2n   =  16.022 ( 0.001)-------------------------------------------------------------------------
S-alpha=   3.415 ( 0.000)-------------------------------------------------------------------------

S+p       =  -6.214 ( 0.002)
S+n       =  -6.232 ( 0.001)
S+2p      = -14.867 ( 0.001)
S+2n      = -15.132 ( 0.003)
S+alpha   =  -3.226 ( 0.001)

gap p     =   3.837 ( 0.024)
gap n     =   2.988 ( 0.001)
gap 2p    =   2.625 ( 0.001)
gap 2n    =   0.890 ( 0.003)
gap alpha =   0.189 ( 0.001)
```