

^{89}Sr $Z = 38$ $N = 51$ adopted link ENSDF link

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

BE = 774.827 (0.000) MeV

Qbeta- = 1.502 (0.000) MeV

	Energy T	J+	J-	J-other	T1/2
89SR 1	0.000	5/2+			1 50.563 D 25
89SR 2	1.032	1/2+			2 1 PS GT
89SR 3				1.473 (7/2)+	3 0.26 PS 10
89SR 4	1.940	5/2+			4 0.19 PS 5
89SR 5	2.008	3/2+			5 0.10 PS 4
89SR 6				2.057 (1/2+,3/2,5/2+)	6
89SR 7				2.062 (9/2+)	7 0.21 PS 6
89SR 8			2.079 11/2-		8 0.33 NS 7
89SR 9				2.280 (1/2)-	9
89SR 10	2.452	3/2+			10
89SR 11				2.570 (3/2)-	11
89SR 12	2.675	7/2+			12
89SR 13				2.707 (5/2-)	13
89SR 14				2.805 (7/2-,5/2+)	14
89SR 15				2.916 3/2+,5/2+	15
89SR 16				2.931 9/2(+)	16 0.15 PS 5
89SR 17	2.962	9/2+			17 0.7 PS 3
89SR 18				3.073 (3/2)+	18
89SR 19	3.128	3/2+			19
89SR 20				3.200	20
89SR 21				3.228 (3/2)-	21
89SR 22	3.249	5/2+			22
89SR 23				3.303 (3/2,5/2,7/2+)	23
89SR 24			3.388 15/2-		24 7 PS GT
89SR 25				3.390	25
89SR 26			3.404 11/2-		26
89SR 27				3.421 (11/2-)	27
89SR 28				3.433 (1/2+,3/2)	28
89SR 29				3.468	29
89SR 30				3.509 (3/2)+	30
89SR 31			3.524 13/2-		31 0.39 PS 12
89SR 32				3.541	32
89SR 33				3.599 (11/2+)	33 0.43 PS 12
89SR 34				3.634 5/2-,7/2-	34
89SR 35				3.652 1/2(+),3/2,5/2	35
89SR 36				3.672 (15/2-)	36 2.4 PS +27-8
89SR 37				3.677 +	37

89SR 38		3.700	5/2+					38
89SR 39						3.728		39
89SR 40						3.745		40

89SR 41					3.751	17/2-		41
89SR 42		3.755	1/2+					42
89SR 43						3.763	+	43
89SR 44						3.829	3/2+, 5/2+	44
89SR 45		3.846	5/2+					45
89SR 46						3.881		46
89SR 47						3.910	(+)	47
89SR 48						3.937	(+)	48
89SR 49						3.988	1/2(+), 3/2, 5/2(49+)
89SR 50						4.017		50

89SR 51						4.034		51
89SR 52		4.050	1/2+					52
89SR 53						4.055		53
89SR 54						4.065	(1/2+, 5/2-, 7/2-)	54
89SR 55						4.072	(+)	55
89SR 56						4.081		56
89SR 57						4.094	1/2(+), 3/2, 5/2	57
89SR 58						4.120		58
89SR 59						4.168	(3/2+, 5/2+)	59
89SR 60						4.180		60

89SR 61						4.199		61
89SR 62						4.207		62
89SR 63						4.209	(19/2)-	63
89SR 64						4.222		64
89SR 65						4.226	(1/2+, 3/2)	65
89SR 66						4.233		66
89SR 67						4.247		67
89SR 68						4.254		68
89SR 69						4.271		69
89SR 70						4.329	(3/2)+	70

89SR 71						4.336	(1/2+, 3/2)	71
89SR 72						4.359		72
89SR 73						4.382		73
89SR 74						4.406		74
89SR 75						4.417		75
89SR 76						4.435	(5/2-, 7/2-)	76
89SR 77						4.445	(1/2+, 3/2)	77
89SR 78						4.465		78
89SR 79		4.472	1/2+					79
89SR 80						4.518	7/2+, 9/2+	80

89SR 81						4.560	(3/2+, 5/2+)	81
89SR 82						4.594	3/2+, 5/2+	82

89SR 83		4.614	1/2+				83
89SR 84					4.626		84
89SR 85		4.660	1/2+				85
89SR 86					4.679	(1/2-, 3/2, 5/2+)	86
89SR 87					4.742	(1/2+)	87
89SR 88					4.759		88
89SR 89					4.790		89
89SR 90					4.818		90

89SR 91					4.865	(7/2+, 9/2+)	91
89SR 92					4.894		92
89SR 93					4.928	(1/2-, 3/2, 5/2+)	93
89SR 94					4.956	(3/2+)	94
89SR 95					5.005		95
89SR 96		5.036	1/2+				96
89SR 97					5.067	3/2+, 5/2+	97
89SR 98					5.081	3/2+, 5/2+	98
89SR 99					5.107		99
89SR 100					5.115	(21/2)	100

89SR 101					5.130		101
89SR 102					5.148		102
89SR 103					5.169	(3/2+, 5/2+)	103
89SR 104					5.208		104
89SR 105					5.242		105
89SR 106					5.259		106
89SR 107		5.280	1/2+				107
89SR 108		5.298	1/2+				108
89SR 109					5.316		109
89SR 110		5.360	1/2+				110

89SR 111					5.399		111
89SR 112					5.418	(1/2+)	112
89SR 113					5.442		113
89SR 114					5.456		114
89SR 115					5.480		115
89SR 116					5.496		116
89SR 117					5.529		117
89SR 118					5.540		118
89SR 119					5.573		119
89SR 120					5.583		120

89SR 121					5.611		121
89SR 122					5.628		122
89SR 123					5.657		123
89SR 124					5.666		124
89SR 125					5.694		125
89SR 126					5.726	(19/2, 21/2, 23/2)	126-
89SR 127					5.753		127
89SR 128					5.773		128

89SR 129			5.825		129
89SR 130			5.858		130

89SR 131			5.925		131
89SR 132			5.979	(23/2)	132
89SR 133			5.995		133
89SR 134			6.115		134
89SR 135			6.188		135
S-n	=	6.359	(0.000)	-----	
89SR 136			6.650	(25/2)	136
89SR 137			6.858	(25/2)	137
89SR 138			7.026	(25/2)	138
S-alpha	=	7.154	(0.002)	-----	
89SR 139			7.422	(27/2)	139
89SR 140			7.984		140

S-p = 10.889 (0.000)-----
S-n = 6.359 (0.000)-----
S-2p = 20.077 (0.000)-----
S-2n = 17.472 (0.000)-----
S-alpha= 7.154 (0.002)-----

S+p = -7.577 (0.000)
S+n = -7.813 (0.001)
S+2p = -16.264 (0.000)
S+2n = -13.586 (0.005)
S+alpha = -3.338 (0.000)

gap p = 3.312 (0.000)
gap n = -1.455 (0.001)
gap 2p = 3.813 (0.000)
gap 2n = 3.886 (0.005)
gap alpha = 3.816 (0.002)