

^{79}Br $Z = 35$ $N = 44$ [link to full NNDC output](#)

Based on ENSDF from Dec 2018, and mass evaluation from 2016

BE = 686.320 (0.001) MeV

	Energy T	J+	J-	J-other	T1/2
79BR 1			0.000	3/2-	1 STABLE
79BR 2	0.208	9/2+			2 4.85 S 4
79BR 3			0.217	5/2-	3 47 PS 4
79BR 4			0.261	3/2-	4 0.13 NS 2
79BR 5				0.307 1/2-, 3/2-	5 4.23 PS 7
79BR 6	0.382	5/2+			6 0.5 NS AP
79BR 7				0.397 1/2-, 3/2-	7 13 PS 4
79BR 8			0.523	5/2-	8 1.91 PS 6
79BR 9			0.606	3/2-	9 1.87 PS 7
79BR 10			0.761	7/2-	10 1.50 PS 4
79BR 11				0.793 (3/2-, 5/2)	11 2.08 PS 14
79BR 12	0.797	13/2+			12 9.0 PS 21
79BR 13				0.832 1/2-, 3/2-	13 0.20 PS 4
79BR 14				0.906 (7/2)-	14
79BR 15				0.940 (3/2)	15
79BR 16				0.954 (7/2-)	16 1.11 PS 7
79BR 17				0.955 3/2+, 5/2+	17
79BR 18				1.032	18
79BR 19	1.039	1/2+			19
79BR 20			1.068	9/2-	20
79BR 21				1.080 5/2-, 7/2-	21
79BR 22				1.112 1/2-, 3/2-	22
79BR 23				1.124 (3/2-, 5/2)	23
79BR 24				1.132 1/2, 3/2	24
79BR 25				1.177 (5/2+)	25
79BR 26	1.181	11/2+			26 0.55 PS 14
79BR 27				1.189 (7/2)	27
79BR 28				1.222 5/2-, 7/2-	28
79BR 29				1.254	29
79BR 30				1.257 (7/2)	30
79BR 31				1.314 (3/2-, 5/2, 7/2-)	31
79BR 32			1.332	3/2-	32
79BR 33				1.333 (9/2-)	33
79BR 34				1.376 5/2-, 7/2-	34
79BR 35				1.390 (9/2)+	35
79BR 36				1.471	36
79BR 37				1.492 (9/2+)	37
79BR 38				1.495 5/2-, 7/2-	38

79BR 39						1.502	1/2,3/2	39
79BR 40						1.513		40

79BR 41						1.513		41
79BR 42		1.517	1/2+					42
79BR 43						1.561		43
79BR 44						1.574	(5/2)+	44
79BR 45						1.613		45
79BR 46						1.622		46
79BR 47		1.683	13/2+					47
79BR 48						1.692	1/2-,3/2-	48
79BR 49				1.714	11/2-			49 0.55 PS 17
79BR 50		1.732	17/2+					50 0.76 PS 21

79BR 51						1.742		51
79BR 52						1.779		52
79BR 53						1.781	(11/2-)	53
79BR 54						1.793		54
79BR 55						1.795	3/2+,5/2+	55
79BR 56						1.800	(7/2-)	56
79BR 57						1.908		57
79BR 58						1.947	3/2+,5/2+	58
79BR 59				1.948	13/2-			59
79BR 60		1.957	15/2+					60 0.21 PS 7

79BR 61						1.974	1/2-,3/2-	61
79BR 62						2.016	3/2+,5/2+	62
79BR 63						2.040	(5/2-,7/2-)	63
79BR 64						2.049	(13/2)	64
79BR 65		2.075	1/2+					65
79BR 66						2.159	1/2-,3/2-	66
79BR 67						2.183		67
79BR 68						2.203		68
79BR 69						2.235		69
79BR 70						2.260		70

79BR 71						2.280	(13/2-)	71
79BR 72						2.315	5/2-,7/2-	72
79BR 73						2.345		73
79BR 74						2.356		74
79BR 75						2.363		75
79BR 76				2.393	13/2-			76 3.5 PS 21
79BR 77						2.414	5/2-,7/2-	77
79BR 78		2.421	17/2+					78
79BR 79						2.425		79
79BR 80						2.435		80

79BR 81						2.463		81
79BR 82				2.469	15/2-			82
79BR 83						2.479	(13/2-)	83

79BR 84						2.511				84
79BR 85						2.529	(1/2-, 3/2-)			85
79BR 86						2.548				86
79BR 87						2.569				87
79BR 88						2.575	(13/2)			88
79BR 89				2.580		15/2-				89
79BR 90				2.726		17/2-				90 0.55 PS 28

79BR 91				2.774		17/2-				91 8 PS 3
79BR 92						2.802				92
79BR 93		2.866		21/2+						93 0.28 PS 4
79BR 94		2.902		19/2+						94 0.17 PS 5
79BR 95						3.088	(19/2)-			95 0.76 PS 21
79BR 96				3.169		19/2-				96
79BR 97						3.235				97
79BR 98		3.366		21/2+						98
79BR 99						3.535	(21/2)-			99 0.38 PS 10
79BR 100						3.560	21/2(-)			100 0.42 PS 14

79BR 101						3.671	(21/2+)			101
79BR 102						3.817	(17/2+; 23/2+)			102
79BR 103						3.908	(17/2-, 19/2, 21/2; 103-)			
79BR 104						3.936	(23/2)+			104 0.187 PS 35
79BR 105				4.067		23/2-				105 1.2 PS 4
79BR 106		4.117		25/2+						106 0.159 PS 21
79BR 107						4.153	(23/2)-			107 0.139 PS 28
79BR 108						4.341	(17/2+; 23/2+)			108
79BR 109		4.530		25/2+						109 0.35 PS 7
79BR 110						4.581	(25/2)-			110 0.26 PS 6

79BR 111						4.721	(25/2+)			111
79BR 112						4.804	(25/2)-			112 0.118 PS 21
79BR 113						4.896				113
79BR 114						4.965				114
79BR 115						5.132	(27/2+)			115
79BR 116						5.214	(27/2-)			116

S-alpha=		5.459		(0.001)						
79BR 117		5.505		29/2+						117 0.049 PS 21
79BR 118						5.579	(27/2-)			118
79BR 119						5.824	(29/2)-			119 0.097 PS 28
79BR 120						5.864	(29/2+)			120

79BR 121						6.019	(29/2+)			121
79BR 122						6.199				122

S-p =		6.331		(0.001)						
79BR 123						6.385	(29/2-)			123
79BR 124						6.527	(31/2+)			124 0.17 PS 6
79BR 125						6.537	(31/2-)			125
79BR 126						7.067	(33/2+)			126
79BR 127						7.224	(33/2-)			127

79BR 128			7.380	(33/2+)	128
79BR 129			7.592		129
79BR 130			8.062	(35/2-)	130

79BR 131			8.149	(35/2+)	131
79BR 132			8.778	(37/2-)	132
79BR 133			8.811	(37/2+)	133
S-n	=	10.687	(0.004)	-----	
79BR 134			10.846	(3/2-)	134
79BR 135			10.969	(1/2+)	135
79BR 136			11.080	(5/2+)	136
79BR 137			11.355	(1/2+)	137
79BR 138			11.434	(3/2+)	138
79BR 139			11.560	(5/2+)	139
79BR 140			11.626	(3/2+)	140

79BR 141			11.834	(1/2-,3/2-)	141

S-p	=	6.331	(0.001)	-----	
S-n	=	10.687	(0.004)	-----	
S-2p	=	16.730	(0.002)	-----	
S-2n	=	18.976	(0.003)	-----	
S-alpha	=	5.459	(0.001)	-----	
S+p	=	-9.114	(0.001)		
S+n	=	-7.892	(0.001)		
S+2p	=	-13.967	(0.005)		
S+2n	=	-18.052	(0.001)		
S+alpha	=	-5.428	(0.003)		
gap p	=	-2.783	(0.002)		
gap n	=	2.795	(0.004)		
gap 2p	=	2.763	(0.005)		
gap 2n	=	0.924	(0.003)		
gap alpha	=	0.031	(0.003)		