

^{78}Br $Z = 35$ $N = 43$ [link to full NNDC output](#)

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

BE = 675.633 (0.004) MeV
 Qbeta- = 0.726 (0.004) MeV
 Qbeta+ = 3.574 (0.004) MeV

	Energy T	J+	J-	J-other	T1/2
78BR 1	0.000	1+			1 6.45 M 4
78BR 2				0.032 (2-)	2 11.3 NS 30
78BR 3				0.055 (1,2)+	3 7.5 NS 11
78BR 4				0.125 (1,2)+	4
78BR 5				0.181 (4+)	5 119.4 US 10
78BR 6				0.193 (0:3)(+)	6
78BR 7				0.197 (1,2,3)(+)	7 4.7 NS 5
78BR 8				0.204 (0:3)(+)	8 5.9 NS 6
78BR 9				0.228 (5+)	9 84 NS 8
78BR 10				0.243 (2,3)-	10 17 NS 2
78BR 11				0.245 (2,3)+	11
78BR 12				0.263 (3,4)-	12
78BR 13				0.265 (5-)	13 5.1 NS 5
78BR 14				0.284	14
78BR 15				0.292	15
78BR 16				0.312	16
78BR 17				0.330 (1,2)+	17
78BR 18				0.338 (6+)	18 7.3 NS 12
78BR 19				0.367 (1:4)-	19
78BR 20				0.389 (3,4)-	20
78BR 21				0.391 (2,3)+	21
78BR 22				0.415	22
78BR 23				0.423 (6-)	23 25 NS LT
78BR 24				0.433 (1,2)+	24
78BR 25				0.438 (7+)	25 3 NS LT
78BR 26				0.447 (0+:3+)	26
78BR 27				0.457 (0:3+)	27
78BR 28				0.468 (8+)	28
78BR 29				0.474	29
78BR 30				0.477 (3-,4-)	30
78BR 31				0.498 (1,2)+	31
78BR 32				0.508	32
78BR 33				0.527	33
78BR 34				0.551 (0:3)+	34
78BR 35				0.579 (2,3)+	35
78BR 36				0.601	36

78BR 37				0.643	(0:3)+	37
78BR 38				0.648	(4)	38
78BR 39				0.663	(0:3)+&(2:6)-	39
78BR 40				0.685	(7-)	40

78BR 41				0.717	(1,2,3)+	41
78BR 42				0.793	(1,2)+	42
78BR 43				0.828	(8-)	43
78BR 44				0.854	(1,2,3)+	44
78BR 45				0.868	(1,2,3)+	45
78BR 46				0.891	(1,2,3)+	46
78BR 47				0.912	(1,2)+	47
78BR 48				0.930	(1,2,3)+	48
78BR 49				0.977	(9+)	49
78BR 50				0.989	(0:3)+	50

78BR 51				1.001	(1,2,3)+	51
78BR 52				1.026	(0:3)+	52
78BR 53				1.030	(8-)	53
78BR 54				1.039	(0:3)+	54
78BR 55				1.060	(1+,2+)	55
78BR 56				1.130	(1,2,3)(+)	56
78BR 57				1.173	(2,3)+	57
78BR 58				1.188	(1,2,3)(+)	58
78BR 59				1.200	(0:3)(+)	59
78BR 60				1.243	(0:3)+	60

78BR 61				1.261	(2,3)+	61
78BR 62				1.372	(10+)	62
78BR 63				1.395	(2,3)+	63
78BR 64				1.463	(9-)	64
78BR 65				1.486	(0,1)+	65
78BR 66				1.570	(LE 3)+	66
78BR 67				1.691	(2,3)+	67
78BR 68				1.746	(0:3)+	68
78BR 69				1.823	(2+,3+)	69
78BR 70				1.905	(10-)	70

78BR 71				1.941	(11+)	71
78BR 72				1.985		72
78BR 73				2.062	(2+,3+)	73
78BR 74				2.162	(2+,3+)	74
78BR 75				2.455	(11-)	75
78BR 76				2.585	(12+)	76
78BR 77				3.016	(12-)	77
78BR 78				3.149	(13+)	78
78BR 79				3.620	(13-)	79
78BR 80				4.049	(14+)	80

78BR 81				4.297	(14-)	81

78BR	82				4.542	(15+)	82
78BR	83				4.922	(15-)	83

S-alpha=	5.017	(0.004)				
78BR	84				5.604	(16+)	84
78BR	85				6.087	(17+)	85

S-p = 6.142 (0.004)-----
S-n = 8.289 (0.005)-----
S-2p = 15.739 (0.004)-----
S-2n = 19.306 (0.010)-----
S-alpha= 5.017 (0.004)-----

S+p = -8.279 (0.005)
S+n = -10.687 (0.004)
S+2p = -13.301 (0.004)
S+2n = -18.579 (0.004)
S+alpha = -5.161 (0.005)

gap p = -2.137 (0.006)
gap n = -2.398 (0.006)
gap 2p = 2.438 (0.005)
gap 2n = 0.726 (0.011)
gap alpha = -0.143 (0.006)